

SAGE Module 2a Session Guides for Community Educators



















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Module 2a: How I can use my new skills

What is this module about and why is it important?

As the girls begin Module 2a and what will be (for many) their second year of learning, the focus is on what the girls are able to do with their new learning. It will be important for you to help the girls understand how their literacy, numeracy and English skills can help them in their everyday lives and support them in economic activity. Many SAGE girls want to go into employment; some want to start their own businesses and become entrepreneurs. The activities in this module support these ambitions, and it will be your job to remind the girls how the SAGE programme supports them with lifelong learning for themselves and their families.

At the end of Module 2a, the girls will engage in a public-speaking activity, sharing their hopes and aspirations for the future. To make this activity special, ask the girls to invite someone who they respect and admire along to the last session. In the final session, the girls can demonstrate their learning by working alongside their guest. The invited guests will also form part of the audience for the assessed public-speaking activity.

New girls may join the SAGE programme in Module 2 because they already have Module 1 skills. It is important to welcome the new girls and help them feel part of the SAGE programme. You might want to include more icebreakers and 'getting to know you' activities in your sessions to help these new girls feel part of your group.

The cross-cutting themes in this module are **gender** (all units), **financial literacy** (Units 1, 2 and 3), **collaboration** (Units 2, 6 and 10), and **environmental issues** (Units 4, 9).

Reflective practice

In Module 1c you learned more about the **Reflective cycle** (page 85) within the SAGE sessions. You will remember that reflection is described as a process where we look back at events and consider their effect. In every SAGE session there are examples of reflection from both community educators and SAGE girls. Read these examples and think about them. Is your experience similar or different? As you plan your SAGE sessions, think about what you learned from the last session – both about the girls and your teaching – and ensure you start from this point in your next session.

Think about which ideas and reflections you want to contribute to the termly **Reflective Practice Meetings** with your hub team.

How to use these session guides

The notes in this guide help you lead the sessions. We recommend you read them carefully before the sessions at least twice, and have them available to check during each session.



Modules, units and sessions

Remember, do not rush through the units, as this will not support the girls' learning. If you have questions about the module materials or the units, contact your SAGE district coordinator

Module 2a materials

You will use these **session guides** together with the Module 2a **Learner's Self-Study Workbook**. You will need a set of resources, some of which are in the girls' learning kits and some are provided in the Learning Hub. You will also need to provide some resources that you can find in your local community.

Strategies for Module 2a

In Module 2a you will know more about the girls in your hub. It is important to differentiate what happens in your hub for your SAGE girls, including adapting the assessments for girls with disabilities and extending higher-attaining girls.

Assessing learning for girls with disabilities

All of the **Progress Assessments** should be adapted for girls with disabilities. It is important to understand what girls are able to do and how best they can demonstrate their learning. For some girls with disabilities, attending the hub and making friends is a success. The information you collect on the girls' pages in your **Progress Book** should include this information. In addition, you need to talk with the hub team and your SAGE district coordinator about how to make specific adaptations for the assessments.

For example:

- a girl with a hearing impairment can sign her Module 2a literacy/English or numeracy assessment
- a girl with a visual impairment can tell a story or share her job advertisement rather than writing it
- a girl with a learning disability may need more time to complete an assessment, or the learning assistant could write it for her
- a girl with a physical disability can pair with another girl, who can present the work for both of them.

The most important message is that you should know your girls and know how they can demonstrate all the things they have learned. **Ask** and **involve** your hub team.

Extending higher-attaining girls

There are lots of ways you can support higher-attaining girls in the session. Here are two examples, but you will have other ideas you can discuss with the hub team.

Readable stories

At the end of the Learner's Self-Study Workbook there are six 'readable stories'. They are intended as a resource for the girls to use as they wish. They do not have to read them in any particular order, and they can read as many or as few as they choose. Remind them from time to time about this resource, and encourage them to use it. If girls finish their independent work, they can read these stories with each other or individually.



Peer support

Some girls may find one subject easier, so they may be higher attaining in literacy but need more support in numeracy. You could ask a girl like this her to support her peers in a literacy session – she could sit with a girl who is finding reading/writing difficult, or she could guide a group of girls in a particular activity. This will also help the higher-attaining girl, because she will need to explain ideas so that others understand. This is a useful skill, especially in numeracy – some girls will just *know* the answer, but it requires a different set of cognitive skills to explain a concept to someone else.

Questioning

You can still use the strategies of **graded questioning** and **guided** and **independent work** to support. Refer back to the **Module 1 Session Guides** to remind yourself about the principles behind the two strategies.

Learning English: Learning the meanings of new words

It is important to remember that many girls will not have much exposure to English in their lives outside of SAGE sessions. Even if they have completed Module 1, there may be many gaps in their knowledge of English.

When words are introduced for the first time in a session activity, it is important for the girls to know the meanings. It is not a good idea to ask: 'Do you understand this word?' (Ggirls may say 'yes' even if they don't really understand.) Instead, if you think the word may be new to *any* of the girls, help them all to understand the meaning. Even if most girls already know how to read the word, some may not and many others won't know the meaning.

Here are some lively, interesting ways to help girls to learn the meanings of new words:

- Show an example.
- **Point to an example in the classroom.** For example, point to an object that is *old*, or bring an example to the lesson, such as a *bottle*.
- **Use drama activities,** like **mime**, to act out an object, for example, pretending to cut with a *knife*. You can also mime adjectives such as *tired* (you are tired) and *funny* (you pretend to laugh at a joke).
- **Demonstrate.** Ask: 'What am I doing?' Then, for example, jump, look for something or open and close the door. You can also demonstrate adverbs such as fast and carefully. (Ask: 'How am I doing this?' and then do something fast/carefully.)
- **Put a word into context.** For example, pretend that you are trying to lift a desk, but you can't because it is *too* heavy. Or draw a happy face of a girl. Why is she happy? She is happy *because* she is enjoying a lesson.
- **Draw a simple picture** of almost any object on the chalkboard. For example, a *car*, *flowers*, cooking with *fire*, a *computer*.
- Give a sentence that demonstrates the meaning. For example:
 - January comes before February.
 - Harare is the most important city in Zimbabwe. It is the *capital* city.
- Compare words with opposite meanings. For example, write two sums on the chalkboard: 2 + 3 = 5 / 8 x 64 = 512. One is *easy*, the other is *difficult*.
- **Give an instruction with the word.** For example: Touch your *chin*. Look at the *ceiling. Bend* your arm. *Pick up* your books.



Numeracy: providing extra challenge

There are a number of ways in which you can support and challenge higher-attaining girls in the sessions. You could give the girls a 'SAGE super challenge' bookmark to help them extend their understanding of the concept that you are working on when they have finished the tasks in the unit (see 2a **Learner's Self-Study Workbook**, page 111). However, if you want to set more challenging work for the girls *from the start of the session*, here are some ideas to do that without moving on to bigger numbers. Some girls may even finish these. If they do, they can go on to the 'SAGE super challenge' bookmark.

· Present the calculation in different ways

Put the *equals sign* in a different place

$$8 + 2 = 4 + \square$$

10 = 3 + 5 +
$$\square$$

Put the *missing information* in a different place

For example, you could present the vertical method in the usual way... + 23

OR

you could put the missing information in $\Box 4$ different places +23

Challenge the girls to work backwards

Give the girls an 'answer' and ask them to come up with questions. For example: The answer is 15. What could the question be?

Ask the girls to compare calculations

Spot the mistake

For example: Here are three calculations, two with the right answer, one with a mistake. Can you spot the mistake?

Odd one out

For example: Three of these questions have the same answer. One has a different answer. Can you find the one that is the odd one out?

$$8 + 4 = 7 + 6 = 8 + 3 + 1 = 3 + 4 + 5 =$$



· Give the girls statements to discuss

For example: Harriet says, 'The total of 25 + 27 will be more than 50.' Chipo says, 'The total of 25 + 27 will be less than 50.' Who is right?

Present the calculations in context as word problems

For example: Dee drove 45 km in the morning and 125 km in the afternoon. How many km did she drive altogether?

Planning your sessions

Each SAGE learning session follows a four-part cycle – PLAN, DO, ASSESS, REFLECT.

Icebreakers and energisers

SAGE is a participatory approach to teaching and learning, so don't forget to keep the girls active. There are some more suggestions for icebreakers and energisers (see **Appendix A**) to keep the girls motivated, and you will already have some from earlier modules. Choose one icebreaker and one energiser for every session – or use your own favourites. Music and dancing are always motivational.

Learner's Self-Study Workbook

Each girl will have her own copy of the Module 2a **Learner's Self-Study Workbook**. You will hand out the workbooks in the first session. The workbook provides the girls with activities to do in the session and at home. The workbooks are for the girls to write in, both in SAGE sessions and when they are away from the hub.



Resources you need to teach this module

Resource provided in the Hub	Resources to find	Resources to make
String	counters	Flash cards
Card paper	four chairs	100 squares
Manila paper	collection of pebbles or large seeds.	Small clocks for each pair
Dice per pair	hub coins you made in Module 1	Large clock
Pencils/pens.		Two sets of digit cards (showing 4–9) for each group of four/five girls
Measuring tape		bead strings
Board/flipchart		Place-value charts
Rulers		large 0–9 digit cards
Chalkboards for each pair		large division chart
Squared paper for each pair of girls		smaller division charts



Assessment objectives

In Module 2a, the SAGE sessions cover the following assessment objectives. You may be familiar with these, as they align to the junior syllabus.

LITERACY/LEARNING ENGLISH

Listening/observing

- Consolidate Module 1 phonics learning
- Respond appropriately to statements and questions, and follow a series of instructions
- Write dictated words
- Listen and comprehend various texts

Speaking/signing

- Participate in public speaking, discussions and conversations on cross-cutting themes
- Express attitudes, feelings, opinions and interests (including intonation and nonverbal signals)
- Use appropriate register for social interactions, including conveying messages
- Explain processes or sequence events related to other learning areas
- Dramatise texts read

Reading/signing

- Read aloud and take part in role play with expression
- Read a variety of texts for leisure, including silently and for an audience
- Read to retell a story

Writing/brailling

- Write legibly and neatly
- Write grammatically correct sentences in guided and free compositions
- Write answers to comprehension questions (with *wh* question words)

Comprehension

- Answer comprehension questions and infer meaning from the context
- Express different reading skills, including reading for gist, details, skimming and scanning
- Summarise a given text

Progress Assessment

There is one assessment *of* learning for literacy/learning English: For girls to prepare a short speech and to present to an audience. See Appendix B for the Literacy/Learning English Progress Assessment form.



NUMERACY

In Module 2a, the SAGE sessions cover the following assessment objectives. You may be familiar with these, as they align to the junior syllabus.

As numeracy provides a foundation for mathematical skills to be used in everyday life, this module also focuses on developing problem-solving skills. Three distinct strategies have been identified: **using diagrams**, **try and improve** and **working systematically**. These strategies enable the girls to apply their knowledge and understanding of number, operations, measures and relationships in context. Problem solving forms the basis of the **Progress Assessment** for this module.

Number

- Place value of digits (0 to 1000)
- Proper fractions
- Mixed numbers
- Decimal numbers (up to two places)
- Percentages (10%, 25%, 50%)
- The connections between fractions, decimals and percentages
- Introducing negative numbers
- Estimation

Operations

- Addition and subtraction of numbers (up to 10 000)
- Multiplication and division by one-digit numbers and by 10, 100
- Multiplication and division of decimal numbers by 10, 100
- Finding fractions of amounts
- · Adding and subtracting fractions with the same denominator
- Finding a percentage (10%, 25%, 50%)

Measures

- Time (am, pm) and telling times to the nearest 5 minutes
- Length estimating, using and converting metres and centimetres
- Rate calculating speed, distance and time
- Finding the area and perimeter of rectangles, squares and composite shapes
- Using money in context (up to \$10 000)
- Profit and loss

Relationships

Data handling – tables, and bar charts

Progress Assessment

There is one assessment *of* learning for numeracy: **Using appropriate problem-solving strategies**. See **Appendix C** for the **Numeracy Progress Assessment form**.



Unit 1: Glory the cook

This first unit in Module 2 introduces a new character called Kiri, a girl from Mozambique. There is also an opportunity for inter-generational dialogue: the girls can ask elders about their favourite recipes. They can record them in their workbooks and share in the next session.

Learning objectives

Literacy/Learning English

- To develop skills in understanding a story, including reading and listening
- To be able to respond to a story and answer questions
- To develop knowledge of the relationships between letters and sounds
- To develop skills in reading and writing single words
- To develop vocabularies in English
- To develop skills in reading, understanding and creating short factual texts
- To write a list of words, in this case a shopping list

Numeracy

- To find fractions of amounts
- To add and subtract fractions with the same denominator

Subject and activity number	Activity	Time (mins)
Session 1		
Literacy 1.1	The unit story	30
Learning English 1.1	Read and write words	30
Numeracy 1.1	Fractions of amounts	60
Session 2		
Learning English 1.2	Find the words	15
Literacy 1.2	Working with a short factual text	40
	Learner's Self Study Workbook	5
Numeracy 1.2	Introducing adding and subtracting fractions	60



Unit 1: Session 1

Literacy activity 1.1: The unit story

30 minutes

Plan

Write the learning objectives and key vocabulary on the board.

Learning objectives

- To develop skills in understanding a story, including reading and listening
- To be able to respond to a story and answer questions

Some girls will be able:

• To read and understand a story in English and write answers to questions about it

Key vocabulary

restaurant, customers, cook, recipe

Do

Point to the learning objectives and tell the girls what they are learning in this activity.

Some of the stories in Module 2 feature the regular characters from Module 1. Others feature new characters. The stories give reading comprehension practice for any girls with higher literacy skills in both English and their home language. They also aim to help the girls understand a little more about different options for future work, and ways they could enter that type of work.

Follow the instructions below for the main story in the **Learner's Self-Study Workbook** for every unit. Refer back to these instructions each time. They are written in full for Units 1 and 2.

Guided work

- 1. **Hand out the Learner's Self-Study Workbooks.** Invite the girls to describe what they can see in the picture on page 6.
- 2. Talk about the picture. Ask them the question(s) about the picture (part A).
- 3. Remember, the session stories have been designed for community educators to read aloud to the group. Do not ask the girls to read aloud unless they are very confident in reading their home language.
- 4. **Read the version of the story in the girls' home language(s).** Encourage the girls to follow in the text with their fingers as you read. **NOTE:** If the girls speak a language other than Shona, Ndebele or Kalanga, translate the story for them.
- 5. **After you have read the story.** Ask the girls in their home language to tell you what they have now learned about Glory, and what she is going to do.



- 6. **Read the story aloud in English.** Encourage the girls to follow the text as you read with their fingers if they can.
- 7. **What happens in the story.** Invite the girls to say things about the story in English. For example, *Glory is going to get some recipes for her aunt.*
- 8. **Read the story again.** Again, the girls follow with their fingers if they can. Perhaps some girls who did not feel confident enough to do this at first will want to try now.
- 9. Perhaps ask the whole group to read some sentences from the story all together, following your example.
- 10. **Read through the questions**. Turn to part C, page 10, and invite volunteers to tell you the answers.

Independent work

10 minutes

- 1. **Working in pairs.** The girls work in pairs to answer the questions in the Learner's Self-Study Workbook. They can write the answers in their home language or English.
- 2. **Support girls.** Work with girls who find writing difficult and ask them to tell you the answers in their home language or English.

Extension activity

For girls who find reading and writing easy, ask them to work in pairs. The girls answer the word meaning exercise (part D). They can speak in their home language or English.

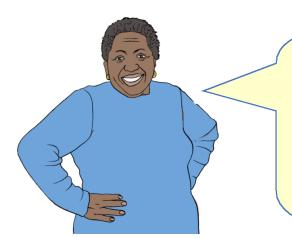
Assess

5 minutes

Choose six different girls to tell you the answers in their home language or English. They must say *why/how* they know it is the correct answer by referring back to the text. Record in your **Progress Book** the girls' achievement.

Answers for Unit 1: C: 1 She is in a town. She and her grandmother are visiting her aunt. 2 She runs a restaurant. 3 There will be a big wedding. 4 She wants to cook some more interesting recipes. 5 She is from Mozambique. 6 Glory is going to ask Kiri for ideas for recipes, and then help her aunt to cook them. 7 So it is easier for Glory to move around in her wheelchair. **D:** 1 restaurant, 2 neighbourhood, 3 recipe, 4 furniture

Reflect



Most of my girls have done Module 1, but some have joined the programme at Module 2. This activity was a useful reminder for the girls who did Module 1, and it helped to fill some gaps in the knowledge of the new girls. It was also a good opportunity for them to share and learn new words in English.



Learning English activity 1.1: Read and write words

30 minutes

Plan

Write the learning objectives on the board.

Learning objectives

- To develop knowledge of the relationships between letters and sounds
- To develop skills in reading and writing single words
- To develop vocabularies in English

You will need:

✓ to write these sounds on the board:

sh ck ch th ng qu ph wh

Do

Point to the learning objectives and tell the girls what they are learning in this activity.

Refer back to these instructions each time. They are written in full for Units 1 and 3.

Guided work

Part 1

10 minutes

- 1. The girls open their workbooks at page 11, part E. Read the words on the top line, other, she, child.
- 2. Stress the sound in red as you say the word o/th/er tell the girls there are three sounds they should be able to hear. Ask for a volunteer to read the next word she how many sounds? The answer is two sh/e. Try the third word ch/i/l/d there are four sounds this time.
- 3. Ask the girls to tell you what the words mean. They may need more help with the word *other*. Use one of the ideas from **Learning English: Learning the meanings of new words** (page 3). For example: **Give a sentence that demonstrates meaning**. *One girl likes literacy, but this other girl likes numeracy.*
- 4. Tell the girls that they can complete the rest of this activity at home.

Part 2

10 minutes

1. Write one of these pairs of letters on the board. Count down '*Three, two, one ...*' The whole group says the sound together. If you notice that not everybody says the sound immediately, repeat later in the activity. If there are any girls who do not understand, work with them during the *Independent work*.



- 2. The girls open their workbooks at page 11, part F, Say the sound of *sh*. (Say just the sound of those letters with no extra sounds: *'shhhh'* not *'shuh'* or *'sher'* etc.) The girls must find the words on the page with that sound. Then they say them together.
- 3. Write *sh* on the board. Ask the girls to suggest more words with *sh*. Write these on the board OR ask one of the girls with a higher level of writing skill to do it. Teach the meanings of any words you think may be new to any of the girls.
- 4. Repeat with the other sounds from the box below.

```
    sh (as in shop, wash, wish, shoe) • ck (as in sock, rock, chicken, black)
    ch (as in chicken, chin, rich, teacher) • th (as in thin, path, this, brother)
    ng (as in long, bring, strong, asking) • qu (as in quick, queen, quite, qualification)
    ph (as in phone, elephant, photo, alphabet) • wh (as in wheel, when, what, wheat)
```

Independent work

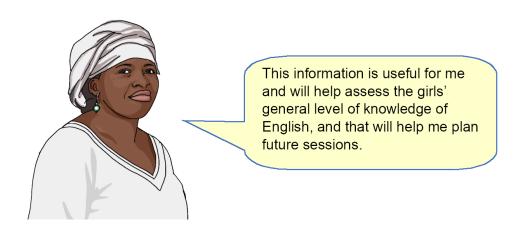
10 minutes

The girls work in pairs. They think of words to write on the workbook page. Lower-attaining girls in English and writing may only be able to copy words from the board. Others may be able to think of longer, more complex words. Visit the pairs while they do this, and give help to anybody who needs it.

Assess

Before the session, choose six girls to focus on. Record which English words these girls already know, and which were new to them. Record this information in your **Progress Book**.

Reflect





Numeracy activity 1.1: Fractions of amounts

1 hour

Plan

Write the learning objective and key vocabulary on the board.

Learning objective

To find fractions of amounts

Key vocabulary

numerator, denominator

Do

Guided work

30 minutes

Part 1: Play 'Mingle, mingle'

10 minutes

- 1. Ask the girls to walk round the room saying 'Mingle, mingle'.
- 2. Call 'twos' the girls should get into pairs. Say that each pair is a 'whole set'. Ask the girls to discuss what part of the whole set each of them is (write ½ on the board as a reminder).
- 3. Ask the girls to mingle again, then call 'threes'. They should get into sets of three.
- 4. Ask the girls what part of the whole set each of them is (write $\frac{1}{3}$ on the board).
- 5. The girls mingle again. Now call 'fours'. Ask the girls to divide their set of four into quarters (all girls separate). Then ask the girls to divide their set of four in half (two groups of two).
- 6. The girls mingle again. Now call 'eights'. Ask the girls to divide the set of eight into halves, quarters and eighths.

Part 2

20 minutes

Point to the learning objective and tell the girls what they are learning in this activity.

1. Turn to page 14 of the workbook. Ask:

Is the pentagon divided in half? Is the rectangle divided in half?

Remind the girls that ½ means that an object or a set is divided into two **equal** parts.

- 2. Tell the girls to look at the picture of the meal on the same page. Explain that Kiri, Glory and her grandmother are going to share the meal. Ask the girls to tell you something that each one of them will have.
- 3. Look at the picture of the eggs on the same page. Write $\frac{1}{3}$ of 12 on the board.



- Ask how many equal parts the denominator tells us the whole is divided into *(three parts)*. This is the same as sharing the meal between three.
- The numerator tells us how many parts we need to find (1 part).
- Ask the girls to draw on the picture to show the box of eggs divided into three equal parts.
- Write the answer on the board: $\frac{1}{3}$ of 12 = 4. Ask the girls to write this under the eggs.
- 4. Repeat each part of step 3 for three more fractions:
 - ²/₃ of 12 (8)
 - $\frac{1}{6}$ of 12 (2)
 - ⁴/₆ of 12 (8)

Independent work

30 minutes

On page 15 in the workbook:

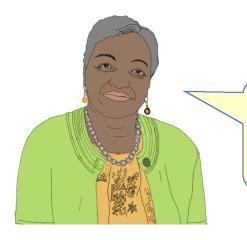
- 1. The girls should decide if the answers to the questions in the table are true or false.
- 2. Where they are false, the girls should give the correct answer.
 - Some girls may work on row one of the table where the answers can be found using the image of the eggs (p14).
 - Other girls may also work on row two where the numerator is one in each case.
 - Some girls may work on each row in turn.

Assess

Record in your **Progress Book** girls who can:

- find fractions of amounts when supported with visual images (row 1 of the table)
- find fractions of amounts when the numerator is one (row 2 of the table)
- find fractions of amounts with a range of denominators (rows 3 and 4)

Reflect



Using the pictures in the workbook helped the girls to understand fractions of objects and sets of objects. Some girls understood the idea of fractions but found the work difficult because they could not remember any tables facts.



Unit 1: Session 2

Learning English activity 1.2: Find the words

15 minutes

Plan

Write the learning objectives on the board.

Learning objectives

- To develop knowledge of the relationships between letters and sounds
- To develop skills in reading single words
- To develop vocabularies in English

You will need:

✓ to write these groups of letters on the board:

nesd plac limk epts

Do

Point to the learning objectives and tell the girls what they are learning in this activity.

Guided work

5 minutes

- 1. Demonstrate for the girls. Try and read out the word 'nesd'. Ask: 'Have you seen this word before?' Tell the girls they need to change the letters around to find the correct word.
- 2. When girls say the word *send*, demonstrate its meaning. For example, ask: 'What am I doing?' Then **send** one girl from the table to another table, by pointing for her to move. Choose a confident girl, so she is not worried that you ask her to move. Then **send** her back to her table. (See **Learning English: Learning the meanings of new words**, page 3)

Independent work

- In pairs, the girls must try to work out the other words. When they have found as many as they can, they compare their words with another pair.
 Answers: send, clap, milk, step
- 2. Read the found words out loud. Get the whole group to say them together with you and check everybody understands the meanings.
- 3. Confident girls could come to the front and demonstrate the meaning of the found word.



Assess

Notice which girls seem able to complete the activity quickly and easily, and which find it more difficult. This will help you to know each girl's current level of skill. Record in your **Progress Book.** This is helpful for avoiding asking girls to do things that are either too easy or too difficult for them.

Reflect



Literacy activity 1.2: Working with a short factual text

40 minutes

Plan

Write the learning objectives on the board.

Learning objectives

- To develop skills in reading, understanding and creating short factual texts
- To write a list of words, in this case a shopping list

Do

Point to the learning objectives and tell the girls what they are learning in this activity.

Guided work

10 minutes

1. Ask the girls to look again at the unit story on page 6 in their workbooks. Ask them to summarise the story in one or two sentences. For example: *Glory says she will ask her new friend for some interesting recipes, and then help her aunt to cook them.* Ideally, the pairs will compose the sentence in English, and then write it down. (There is space at the back of the workbook they can use for this.) But if they cannot do this, then they can just remember the sentence, and/or use their home language.



2. Invite two or three pairs to say their sentence or sentences to the group. Do the others agree that it summarises the story?

Independent work

15 minutes

Still in their pairs, the girls look at the text in part G, page 12. First, they match the pictures with words in the recipe. Allow them time to discover the text independently.

Ask the girls to guess the meanings of the words in red. Then encourage the girls who can to fill the gaps with the missing words. But if they cannot do this, then they can just try to complete the exercise orally. Visit the pairs while they work, and help anybody who is struggling. Assist them by translating into the home language if necessary.

Answers: *spicy* = with a strong flavour from pepper and/or other spices, *chopped* = cut into very small pieces, *leaves* = the green parts of a plant, *pan* = something to cook food in, *soft* = the opposite of *hard*; gap-fill words in order – fry, add, cook, add, cook, serve.

Guided work

5 minutes

Tell the girls to turn to part H (page 13), and read the instructions. Invite those girls who can to write their recipes in the space. Others can just say their recipes.

Independent work

10 minutes

- 1. Each pair writes a shopping list for their recipe. Visit them while they do this, and help them with the spellings of the words they need. Perhaps write the most popular words on the board/chart.
- 2. When they have finished, the pairs show their shopping lists to other pairs. Can they guess each other's dishes just from reading the shopping list?

Assess

This is the first time you will assess girls' writing. Note the names of girls who (a) struggled to write anything or (b) were able to produce written words/sentences with ease. Record this in your **Progress Book**. Next time, you could get these girls to work together in a pairwork activity, so the girls with higher levels of skill can help those with lower levels of skill.



Reflect

I find it very useful that activities like this can work at different levels for girls with different levels of skill. It means that everybody can feel they have done the activity successfully. Of course, I make sure no girl feels that having a higher level of skill is 'better' than having a lower level. It's just that some girls in the group can do things others haven't learned to do – yet.







The girls who can do things I haven't learnt how to do yet make me think, 'If she can do it, so can I'.

Learner's Self-Study Workbook

- 1. At the end of this and every other unit, give the girls the preparation and help they will need to complete the self-study pages at home. These pages help them to prepare for the next session. So, at the end of Unit 1, ask them to look at the workbook pages for Unit 2. At the end of Unit 2, ask them to look at the pages for Unit 3, and so on.
- 2. Ask the girls to read the Unit 2 story and answer the questions about the text at home if they can. In the next session, it may be that the girls with higher levels of skill who have already answered the questions can help the others.



Numeracy activity 1.2: Introducing adding and subtracting fractions

1 hour

Plan

Write the learning objective and key vocabulary on the board.

Learning objective

To add and subtract fractions with the same denominator

Key vocabulary

numerator, denominator

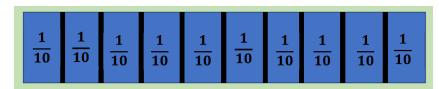
You will need:

- ✓ to draw diagram A on the chalkboard (a square divided into quarters, an eighth and two sixteenths). It is also in the workbook (page 15)
- ✓ a strip of paper divided into ten equal parts (Diagram B).

Diagram A

A B C D E

Diagram B



Do

40 minutes

Guided work

Part 1: Counting with fractions – 'Switch'

- 1. Stand in a large circle with the girls.
- 2. Throw the ball to a girl and call out 'quarter'. Ask her to throw it to another girl and call out 'two quarters', throw again and say 'three quarters', on the next throw say 'four quarters, or one'. Keep going through 'five quarters', 'six quarters', 'seven quarters', 'eight quarters, or two'.
- 3. When you get to ten quarters, shout 'switch'.
- 4. Start the throwing again, but this time counting backwards
- 5. When you get to three-quarters, shout 'switch' and start counting forwards again.
- 6. Repeat with a different fraction



Part 2: Adding and subtracting fractions

30 minutes

Point to the learning objective and tell the girls what they are learning in this activity.

- 1. Point to the square diagram on the board and ask the girls to look at the copy on page 15 of the workbook.
- 2. Ask the girls:
 - What fraction of the whole shape is A? Label shape A ¹/₄. Ask the girls to do the same.
 - Repeat for D ($^{1}/_{8}$) and C ($^{1}/_{16}$).
- 3. Ask the girls:
 - What is the total of shape $A + B + E = ? (\frac{1}{4} + \frac{1}{4} + \frac{1}{4} = \frac{3}{4})$
 - What is the total of shape A + B? ($\frac{1}{4} + \frac{1}{4} = \frac{2}{4}$). How else could we write this? ($\frac{1}{2}$)
 - What is the total of shape C + F? ($\frac{1}{16} + \frac{1}{16} = \frac{2}{16}$). How else could we write this? ($\frac{1}{8}$)
- 4. Using your strip of paper divided into tenths, ask:



- What is each part called? (one tenth)
- How many equal parts are there? (ten)
- 5. As the girls watch, tear up the strip into separate parts and demonstrate $\frac{8}{10} \frac{3}{10} = \frac{5}{10}$





6. Repeat with different examples such as:

$$\frac{7}{10} - \frac{2}{10}$$

 $\frac{4}{10} + \frac{3}{10}$

Independent work

- 1. Turn to number Activity 4 on page 16 in the workbook.
- 2. Glory is helping to make drinks for the café. The recipe gets quite complicated if several people come into the café at once and so she decides to make a list of the ingredients needed for different numbers of drinks.
- 3. Ask girls to complete the table on page 16.



Assess

Turn to number 5 page 16 in the workbook . Ask the girls to decide who is correct by voting for each of the statements. Use this information to assess the girls understanding of addition of fractions.

Reflect



Fractions and division are linked. The girls who understood division quickly understood fractions.



Unit 2: Chiedza the internet user

The story for Unit 2 is about Chiedza, a girl who successfully finished the SAGE programme and is now working in a clothing cooperative. Like many SAGE girls, Chiedza is keen to use computers to help her in her work. The story communicates ideas about using the internet to find key information.

Learning objectives

Literacy/Learning English

- To develop skills in understanding a story, including reading and listening
- To be able to respond to a story and answer questions
- To develop skills in reading, understanding and writing short sentences
- To develop knowledge of the relationships between letters and sounds
- To develop skills in reading single words
- To develop vocabularies in English
- To develop skills in reading, understanding and creating short factual texts
- To write a short text in sentences

Numeracy

- To understand 50% and 25%
- To read information from tables and charts
- To present information in bar charts

Subject and activity number	Activity	Time (mins)	
Session 1			
Literacy 2.1	The unit story	30	
Learning English 2.1	Writing short sentences	35	
Numeracy 2.1	Thinking about percentages	60	
Session 2			
Learning English 2.2	Match the syllables	10	
Literacy 2.2	Working with a short factual text	40	
	Learner's Self-Study Workbook	5	
Numeracy 2.2	Information in charts	60	



Unit 2: Session 1

Literacy activity 2.1: The unit story

30 minutes

Plan

Write the learning objectives and key vocabulary on the board.

Learning objectives

- To develop skills in understanding a story, including reading and listening
- To be able to respond to a story and answer questions

Some girls will be able:

To read and understand a story in English and write answers to questions about it

Key vocabulary

internet, café, sewing machine, weather forecast, website

Do

Point to the learning objectives and tell the girls what they are learning in this activity.

Some of the stories in Module 2 feature the regular characters from Module 1. Others feature new characters. The stories give reading comprehension practice for any girls with higher literacy skills in both English and in their home language. They also aim to help the girls understand a little more about different options for future work, and ways they could enter that type of work.

Follow the instructions below for the main story in the **Learner's Self-Study Workbook** for every unit. Refer back to these instructions each time. They are written in full for Units 1 and 2.

Guided work

- 1. **Hand out the Self-Study workbooks.** Invite the girls to describe what they can see in the picture on page 17.
- 2. **Talk about the picture.** Ask them the questions about the picture (part A).
- 3. Remember, the session stories have been designed for community educators to read aloud to the group. Do not ask the girls to read aloud unless they are very confident in reading their home language.
- 4. **Read the version of the story in the girls' home language(s).** Encourage the girls to follow in the text with their fingers as you read. **NOTE:** If the girls speak a language other than Shona, Ndebele or Kalanga, translate the story for them.



- 5. **After you have read the story.** Ask the girls in their home language to tell you what they have now learned about what Chiedza was doing.
- 6. **Read the story aloud in English.** Encourage the girls to follow the text as you read with their fingers if they can.
- 7. **What happens in the story.** Invite the girls to say things about the story in English. For example, *Chiedza was looking for information on the internet.*
- 8. **Read the story again.** Again, the girls follow with their fingers if they can. Perhaps some girls who did not feel confident enough to do this at first will want to try now.
- 9. Perhaps ask the whole group to read some sentences from the story all together, following your example.
- 10. **Read through the questions**. Turn to part C, page 21, and invite volunteers to tell you the answers.

Independent work

10 minutes

- 1. **Working in pairs.** The girls work in pairs to answer the questions in the Learner's Self-Study Workbook. They can write the answers in their home language or English.
- 2. **Support girls.** Work with girls who find writing difficult and ask them to tell you the answers in their home language or English.

Extension activity

For girls who find reading and writing easy, ask them to work in pairs. The girls answer the word meaning exercise (part D). They can speak in their home language or English.

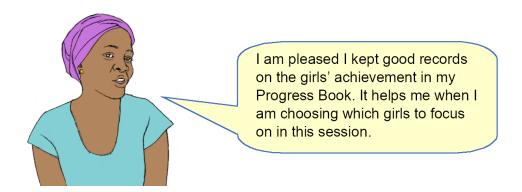
Assess

5 minutes

Choose six different girls to tell you the answers in their home language or English. They must say *why/how* they know it is the correct answer by referring back to the text. Record in your **Progress Book** the girls' achievement.

Answers for Unit 2: C 1 You can use the internet. 2 She wants to find a good price for a new sewing machine. 3 a weather forecast, 4 tell her family and friends about the weather forecast; **D** 1 sewing machine, 2 search, 3 notes, 4 weather forecast, 5 type, 6 crops

Reflect





Learning English activity 2.1: Writing short sentences

35 minutes

Plan

Write the learning objective on the board.

Learning objective

• To develop skills in reading, understanding and writing short sentences

Do

Point to the learning objective and tell the girls what they are learning in this activity.

Guided work

10 minutes

1. Write this short sentence on the board/flipchart, but do not say it. (Choose something different to computers if you wish.)

I like computers.

Ask the girls to read the sentence silently, and then say it to their neighbours.

2. Rub out *computers*, or rewrite the sentence with a line instead of *computers*.

_		
	like	
_	IINE	

Ask for suggestions for words that could go on the space. Write them on a separate part of the board/chart. Make sure some words end with *-ing*, for example *I like dancing*.

Independent work

20 minutes

- 1. Ask the girls to turn to page 21, part E, in the workbooks. The girls work in pairs to think of sentences they can write. They can use words that are already on the board, or use new words. They can also use phrases, such as I like talking with my friends, and perhaps write sentences beginning with I don't like... In this way, they can write sentences according to their level of writing skill.
- 2. The girls put their work on the tables, or in some other place where everybody can see them. They then walk around and read the sentences. They are looking to see which things are mentioned several times.

Extension task

- 1. For higher-attaining girls, ask them *why* they like the thing or activity they have written down. Ask them to write a sentence saying what it is and why they like it.
- 2. Pair, share: In pairs, the girls agree which things they both like and which they don't.



Guided work

5 minutes

Ask the girls to stand up. Ask one girl to read her sentence, for example, 'I like computers.' If other girls have said the same thing, they sit down. Choose another girl who is still standing. If other girls have the same thing, they sit down. Keep going until all girls are sitting down.

Assess

This is the second writing activity you can assess. After the girls have finished the session, read through their sentences. Note down the things girls have in common and where they need more help. For example, *All girls can write the phrase 'I like...'. Most girls need help using capital letters and full stops.*

Reflect



Numeracy activity 2.1: Thinking about percentages

1 hour

Plan

Write the learning objective and key vocabulary on the board.

Learning objective

To understand 50% and 25%

Key vocabulary

half, quarter, percent, %



You will need:

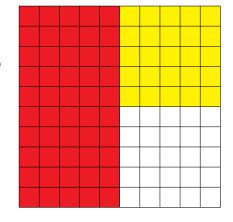
✓ to draw this diagram on your chalkboard (a 100 square, use colour or different shading to show 50% and 25%).

Do

Guided work

35 minutes

Part 1



- 1. Point to the square on the board and say this is a whole shape. Ask the girls what fraction is shaded red. ($\frac{1}{2}$)
- 2. Point to one small square of the shape and ask girls to discuss with their partner what fraction of the whole shape you are pointing to. (One hundredth) How do they know? (One out of a hundred parts) Write $\frac{1}{100}$ on the board.
- 3. Ask the girls how many hundredths are shaded red. $(\frac{50}{100})$
 - Write $\frac{1}{2} = \frac{50}{100}$ on the chalkboard.
 - Explain that 'per cent', means 'out of 100' so $\frac{50}{100}$ = 50%.
 - Use the diagram to show the girls that 50% is also equal to 1/2.

Part 2

- 1. Ask the girls to move to one corner of the room if they have a birthday in June or July and another corner for the other months.
 - Ask if more or less than 50% of the girls have a birthday in June or July.
 - Write a sentence on the board, like a news report about your hub (see example).
- Repeat for if they walk less than 2 km to the hub (one corner) or further (another corner).
 - Ask if more or less than 50% of girls walk more than 2 km to the hub
 - Add a sentence on the board.
- 3. Repeat for if they have two or fewer sisters (one corner) or more (another corner).

- **OUR HUB**
- Less than 50% of girls in our hub have a birthday in June or July
- More than 50% of girls walk more than 2km to the hub
- More than 50% of girls have more than two sisters
- Ask if more or less than 50% of girls have more than two sisters.
- Add a sentence on the board
- 4. Look back to the shaded 100 square. Ask:
 - What fraction is shaded yellow? (1/4)
 - How many hundredths are coloured yellow? (25/100)
 - What percentage of the squares are coloured yellow? (25%)



- Write $\frac{1}{4} = \frac{25}{100} = 25\%$ on the chalkboard.
- 5. Ask the girls if these statements are true or false.
 - About 25% of the girls in our hub are wearing a hat today.
 - About 25% of the girls in our hub are wearing sandals (not shoes) today.
 - About 25% of the girls in our hub are wearing something yellow today.

Independent work

25 minutes

- 1. Ask the girls to turn to page 24 in their workbooks.
- 2. Ask the girls, in pairs, to think of and then to write a newspaper headline about bus times using the information about 200 bus journeys.
- 3. Most girls will then go on to write a second headline.
- 4. Some girls will also calculate how many buses are in each category.

Assess

Ask the girls questions as they work, to probe whether they understand 50% and 25%:

- Which is greater, 50% or 25%?
- Which fraction is 50% the same as?
- Which fraction is 25% the same as?

Reflect

I posed specific questions to Tanashi and Miracle as I was not quite sure if they had understood. Tanashi will need further support, but Miracle now understands.





Unit 2: Session 2

Learning English activity 2.2: Match the syllables

10 minutes

Plan

Write the learning objectives on the board.

Learning objectives

- To develop knowledge of the relationships between letters and sounds
- To develop skills in reading single words
- To develop vocabularies in English

You will need:

✓ to write the halves of the words on the board/chart in two columns:

sis	day
gar	ing
Sun	ish
six	den
fin	teen
walk	ter

Do

Point to the learning objectives and tell the girls what they are learning in this activity.

Independent work

- 1. Demonstrate the activity for the girls. Read the first syllable /sis/ and say to the girls you are looking for the syllable partner to complete the word. Try some nonsense words, for example sisday and sising. Ask the girls: 'What is wrong with these words?'
- 2. When girls are confident about the activity, ask them to work in pairs to find the words. When they have found as many as they can, they compare their words with another pair.
 - Answers: sister, garden, Sunday, sixteen, finish, walking
- 3. Go over the words, getting the whole group to say them together and checking everybody understands the meanings. Use **Drama** and **Demonstrate** activities to explain the meaning of the words (see page 3).
- 4. Ask if any girls would like to explain the meanings to the group.



Some of the words were easy, but there were two words I didn't know. Now I have learned them!



Assess

Notice which girls seem to work well together in pairs, and which not so well. This can help you to put girls in pairs that will work well together in the future.

Reflect

This is a useful activity. It helps me to improve my understanding of syllables in English.



Literacy activity 2.2: Working with a short factual text

40 minutes

Plan

Write the learning objectives on the board.

Learning objectives

- To develop skills in reading, understanding and creating short factual texts
- To write a short text in sentences



Do

Point to the learning objectives and tell the girls what they are learning in this activity.

Guided work

10 minutes

- 1. Ask the girls to look again at the unit story on page 17 in their workbooks. Ask them to summarise the story in one or two sentences. Ideally, the pairs will compose the sentence in English, and then write it down. (There is space at the back of the workbook they can use for this.) But if they cannot do this, then they can just remember the sentence, and/or use their home language.
- 2. Invite two or three pairs to say their sentence or sentences to the group. Do the others agree that it summarises the story?

Independent work

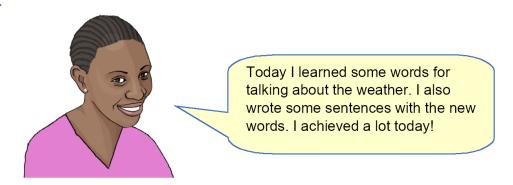
30 minutes

- 1. Working in pairs, the girls read the weather forecast on page 22, part F.
- 2. Ask the girls to locate their region on the map. Where is the nearest town or city? Discuss with the girls what the weather is currently like. How can they show this on the blank map?
- 3. Ask the girls to complete their own different forecasts. Some girls may only be able to draw symbols, but encourage them to write forecasts as well, following the example at the top of the page. Visit the pairs, and help anybody who is struggling. Assist them by translating into the home language if necessary.
- 4. When the pairs have finished, they compare their forecasts with another pair.

Assess

Before the session, choose four girls to focus on. Observe these girls in the session and note down how easy or difficult they found the writing activity. After the session, look at their writing and make comments in your **Progress Book**. You will need to help those who found it difficult during *Independent work* in the next writing session. Talk with the learning assistant about how she can provide support.

Reflect





Learner's Self-Study Workbook

5 minutes

Ask the girls to read the Unit 3 interview with a driver, and answer the questions about the text at home if they can. In the next session, it may be that the girls with higher levels of skill who have already answered the questions can help the others.

Numeracy activity 2.2: Information in charts

1 hour

Plan

Write the learning objectives and key vocabulary on the board.

Learning objectives

- To read information from tables and charts
- To present information in bar charts

Key vocabulary

bar chart

You will need:

✓ to draw this table on your chalkboard (also in workbook).

Monthly Rainfall Zimbabwe

Jan	Feb	Mar	Apr	May	Jun	July	Aug	Sep	Oct	Nov	Dec
190mm	170mm	100mm	40mm	10mm	2mm	2mm	3mm	7mm	40mm	90mm	180mm

Do

Point to the leaning objectives and tell the girls what they will be doing in this activity.

Guided work

20 minutes

- 1. Ask the girls to turn to page 24 in the workbook and look at the graph of monthly temperatures in Zimbabwe in number 2.
- 2. Ask the girls to work in pairs to find:
 - The months with the highest temperature
 - The months with the lowest temperature
 - The number of months when the temperature was above 20 degrees
 - True or false? The temperature is above 20° for 50% of the year.



- True or false? The temperature is 15°C or less for 25% of the year.
- 3. Now ask each pair to make up a sentence that might form part of a news report about temperatures in Zimbabwe.
- 4. Listen to sentences from as many pairs as time will allow.

Independent work

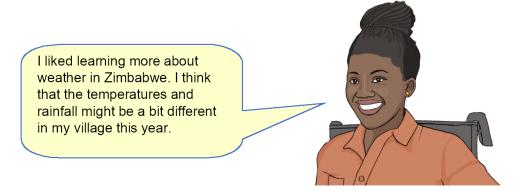
40 minutes

- 1. The girls are going to make a bar graph to show rainfall in millimetres using the previous chart as an example. Put the girls in pairs or small groups.
- 2. Ask each group to colour or shade the correct number of squares in a bar for each month. The axes should be numbered and labelled (use the previous chart as an example) and a title added. Each square should represent 10mm. Note girls will have to shade a fraction of a square for months with less than 10mm rainfall.
- 3. Once they have made the graph, ask the pairs/groups to write down three questions about it that they could ask another pair/group.
- 4. They then swap and answer questions.

Assess

Watch and listen while the girls are making the graphs. This task requires an understanding of several aspects of mathematics – number, measure and graphs. Note where girls are able to make connections with different aspects of mathematics and where there are any difficulties. There will be opportunities in the next sessions to pick up on things that the girls find difficult.

Reflect





Unit 3: Dee the driver

Some of you will know Dee, the driver. She has been working for PLAN for many years and is proud to be supporting girls. Her favourite motivation is 'the sky is the limit'. Share with the girls your favourite motivations from music, stories or well-known expressions.

Learning objectives

Literacy/Learning English

- To listen to and understand a story in the home language
- To respond to questions about the text
- To develop knowledge of the relationships between letters and sounds
- To develop skills in reading and writing single words
- To develop vocabularies in English
- To develop skills in reading, understanding and creating short factual texts
- To exchange factual information learned from reading a text

Numeracy

- To use am and pm
- To tell the time to the nearest five minutes
- To estimate a metre
- To work out speed, distance and time using different kinds of transport

Subject and activity number	Activity	Time (mins)
	Session 1	
Literacy 3.1	The unit story	30
Learning English 3.1:	Read and write words	35
Numeracy 3.1:	Time in intervals	60
	Session 2	
Learning English 3.2:	Find the words	10
Literacy 3.2	Working with a short factual text	40
Numeracy 3.2	How big is 1 metre?	15
Numeracy 3.3	Distance, time and speed	45



Unit 3: Session 1

Literacy activity 3.1: The unit story

30 minutes

Plan

Write the learning objectives and key vocabulary on the board.

Learning objectives

For all girls:

- To listen to and understand a story in the home language
- To respond to questions about the text

Some girls will be able:

• To read and understand a story in English and write answers to questions about it

Key vocabulary

driver, organisation, distance, the sky's the limit

Do

Point to the learning objectives and tell the girls what they are learning in this activity.

Follow the instructions given in Units 1 and 2.

Assess

Choose six different girls to tell you the answers in their home language or English. They must tell *why/how* they know that is the correct answer by referring back to the text. Record in your **Progress Book** the girls' achievement.

Answers for Unit 3: C The answers are summaries of each paragraph in the interview. **D** 1 conversation, 2 scary, 3 game reserve, 4 tourists

Reflect





Learning English activity 3.1: Read and write words

35 minutes

Plan

Write the learning objectives on the board.

Learning objectives

- To develop knowledge of the relationships between letters and sounds
- To develop skills in reading and writing single words
- To develop vocabularies in English

You will need:

✓ to write these sounds on the board:

ai ee igh oa oo ur ar or

Do

Point to the learning objectives and tell the girls what they are learning in this activity.

Refer back to these instructions each time. They are written in full for Units 1 and 3.

Guided work

10 minutes

Part 1

- 1. The girls open their workbooks at page 32, part E. Read the words on the top line, *start*. *look*, *agree*.
- 2. Stress the sound in red as you say the word s/t/ar/t tell the girls there are four sounds they should be able to hear. Ask for a volunteer to read the next word look how many sounds? The answer is three l/oo/k. Try the third word a/g/r/ee there are four sounds this time.
- 3. Ask the girls to tell you what the words mean. Use one of the ideas from **Learning English: Learning the meanings of new words** (page 3). For example: **Drama**. Mime the word *start* by pretending to be at the start of a race. Ask for volunteers to mime the other two words *look* and *agree*.
- 4. Tell the girls that they can complete the rest of this activity at home.

Part 2

10 minutes

1. Write one of these pairs of letters on the board. Count down *'Three, two, one...'* The whole group says the sound together. If you notice that not everybody says the sound immediately, repeat later in the activity. If there are any girls who do not understand, work with them during the independent session.



- 2. The girls open their workbooks at page 32, part F. Say the sound of *ai*. (Say just the sound of those letters with no extra sounds: 'ai'.) The girls must find the words on the page with that sound. Then they say them together.
- 3. Write *ai* on the board/flipchart. Ask the girls to suggest more words with *ai*. Write these on the board OR ask one of the girls with a higher level of writing skill to do it. Teach the meanings of any words you think may be new to any of the girls.
- 4. Repeat with the other sounds from the box below.

```
ai (as in rain, fail, brain, straight) • ee (as in tree, free, seen, three)
```

igh (as in high, right, fight, might) • oa (as in soap, boat, goal, foal)

oo (as in wood, good, book, shook) • ur (as in turn, church, purple, burnt)

ar (as in car, arm, stars, party) • or (as in fork, born, forty, orphan)

Independent work

15 minutes

The girls work in pairs. They think of words to write on the workbook page. Lower-attaining girls in English and writing may only be able to copy words from the board. Others may be able to think of longer, more complex words. Visit the pairs while they do this, and give help to anybody who needs it.

Assess

Before the session, choose six girls to focus on. Record which English words these girls already know, and which were new to them. Record this information in your **Progress Book**.

Reflect





Numeracy activity 3.1: Time in intervals

1 hour

Plan

Write the learning objectives and key vocabulary on the board.

Learning objectives

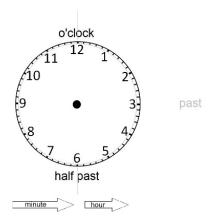
- To use am and pm
- To tell the time to the nearest five minutes

Key vocabulary

hour, minute, o'clock, half, quarter

You will need:

- √ labels am and pm
- ✓ the clocks you made in Unit 1b using this template;
 you will need one clock for each pair of girls
- ✓ a large clock that all the girls can see.



to

Do

Guided work

Part 1: am and pm

15 minutes

Point to the first learning objective and tell the girls what they are learning in this activity.

- 1. Explain to the girls there are 24 hours in a day, but we see only 12 numbers on a clock.
- 2. Make 12 o'clock on your teaching clock (midday or midnight). Explain the day is split in two. All the hours before midday (from 12 midnight) are written with 'am'. And all hours after midday (until midnight) are written with 'pm'. So, instead of saying, 'We brush our teeth at 7 in the morning' we can say 'We brush our teeth at 7 am'. Or, instead of saying, 'We go to bed at 8.30 in the evening', we can say 'We go to bed at 8.30 pm'.
- 3. Put labels for am and pm in different parts of the hub. Ask the girls to walk to am or pm for each of the situations:
 - Eating breakfast (am)
 - Walking to the hub (am)
 - Walking home from the hub (pm)
 - Cooking (am and pm)
 - Sleeping (am and pm)
- 4. Ask some of the girls to go to the am section and others to go to the pm section. Ask them to tell you something that they would be doing in am/pm.



Part 2: Telling the time in five-minute intervals

25 minutes

Point to the second learning objective and tell the girls what they are learning in this activity.

Guided work

- 1. Put the girls in pairs. Each pair has a clock.
- 2. Ask the girls to move the hour hand and count with you around the clock -1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12.
- 3. Ask the girls to move the minute hand with you and count around the clock 5, 10, 15, 20, 25, 30, 35, 40, 45, 50, 55, 60.
- 4. Make 3 pm on your clock, then 5:30, then 8:15. For each time, ask the girls:
 - What time is it?
 - What would you be doing if it was am or pm?
 - What time would it be half an hour later?
- 5. Demonstrate 'ten minutes past 5'. Count with the hour hand to 5. Then count 2 lots of 5 with the minute hand to show 'ten past'.
- 6. Demonstrate other times, such as:

20 minutes past 2

5 minutes to 3

20 minutes to 1.

Independent work

15 minutes

- 1. Ask the girls to turn to page 34 in their workbooks.
- 2. Ask them, working in pairs, to decide if each journey started in the morning or the afternoon.
- 3. Ask them to draw the hands on the clock to show the pick up times during Dee's day.

Assess

5 minutes

At the end of the lesson ask the girls to reflect on what they have learned and see if they can make any connections with their everyday lives. You could ask: 'Why is learning to tell the time important for you?'

Reflect

Some of the girls have phones where they see the time written as 7:20. I will make connections with this next time that we have a session about time.





Unit 3: Session 2

Learning English activity 3.2: Find the words

10 minutes

Plan

Write the learning objectives on the board.

Learning objectives

- To develop knowledge of the relationships between letters and sounds
- To develop skills in reading single words
- To develop vocabularies in English

You will need:

✓ to write these groups of letters on the board:

wint

ropc

steb

stlo

Do

Point to the learning objectives and tell the girls what they are learning in this activity.

Independent work

10 minutes

Repeat **Learning English activity 1.2: Find the words** with the words you have written on the board.

Answers: twin, crop, best/bets, lost/lost

Assess

Repeat the assessment from Learning English activity 1.2: Find the words.

Reflect

Now the girls understand this activity, I will make it more active in the next session.





Literacy activity 3.2: Working with a short factual text

40 minutes

Plan

Write the learning objectives and key vocabulary on the board.

Learning objectives

- To develop skills in reading, understanding and creating short factual texts
- To exchange factual information learned from reading a text

Key vocabulary

equal, million, include, programme

Do

Point to the learning objectives and tell the girls what they are learning in this activity.

Guided work

10 minutes

- 1. Ask the girls to look again at the unit story on page 26 in their workbooks. Ask them to summarise the story in one or two sentences. Ideally, the pairs will compose the sentence in English, and then write it down. (There is space at the back of the workbook they can use for this.) But if they cannot do this, then they can just remember the sentence, and/or use their home language.
- 2. Invite two or three pairs to say their sentence or sentences to the group. Do the others agree that it summarises the story?

Independent work

30 minutes

- 1. The girls read the text in part G and answer the questions in pairs. Then they share their answers with another pair.
 - **Answers: G** 1 1937, 2 Plan helps children to have better lives, and they help girls to be more equal with boys. 3 in 71 countries, 4 yes, 5 the SAGE programme.
- 2. Ask them to cover the text, and then take it in turns to ask a question the partner must try to answer from memory.
- 3. Encourage the girls to write answers to the questions. Visit the pairs, and help anybody who is struggling. Assist them by translating into the home language if necessary. If any girls do not want to write answers, accept that.

Assess

Before the session, choose four girls to focus on. Observe these girls in the session and note down how easy or difficult they found the writing activity. After the session, look at their writing and make comments in your **Progress Book**. You will need to help those who found



it difficult during *Independent work* in the next writing session. Talk with the learning assistant about how she can provide support.

Reflect



Learner's Self-Study Workbook

5 minutes

Ask the girls to read the Unit 4 story, and answer the questions about it if they can.

Numeracy activity 3.2: How big is 1 metre?

15 minutes

Plan

Write the learning objective and key vocabulary on the board.

Learning objective

• To estimate a metre

Key vocabulary

distance, time, speed

You will need:

- √ a 1-m measure
- ✓ string.



Do

Guided work

15 minutes

- 1. Ask the girls to stand in a line outside the hub.
- 2. Ask them to step forward until they think they have moved 1 m.
- 3. Show them your metre measure who was the closest?
- 4. Ask the girls to cut a piece of string that measure their arm span from the tips of their fingers. Who has an arm span closest to a metre?
- 5. Ask the girls to estimate how many of their handspans will be the same as 1 m. Test their estimates.
- 6. Ask the girls about road signs they have seen have they seen km written on a sign? Do they know what it means? Can they tell you about a distance that they think is about 1 km?



Numeracy activity 3.3: Distance, time and speed

Plan

45 minutes

Write the learning objective and key vocabulary on the board.

Learning objective

• To work out speed, distance and time using different kinds of transport

Key vocabulary

distance, time, speed

Do

Guided work

25 minutes

Point to the learning objective and tell the girls what they are learning in this activity.

- 1. Ask the girls to turn to page 35 in the workbook and read the two girls' statements in number 2. Who is right? Give the girls time to discuss in pairs and then in fours. After a few minutes give them a clue: how far does each girl walk in one hour?
- 2. If the girls still need help solving the problem, then you may find it helpful to draw these tables on the board and record each step in a diagram.



Journey 1

Distance 8 km					
Time 2 hours					
1 h 1 h					
4 km	4 km				
Answer					
Speed = 4 km/h					

Journey 2

Distance 6 km						
Time 1½ hours						
½ hour ½ hour ½ hour						
2 km	2 km	2 km				
Answer						
Speed = 4 km/h						

 Read this problem to the girls. As you read, girls should jot down the key information. Give them time to discuss in pairs, then ask for the calculation that was needed and the solution.

Chiedza cycled to the internet café one day.

Her speed was 8 km per hour.

Her journey is 4 km.

How long did her journey take?

 Read this problem to the girls. As you read, girls should jot down the key information. Give them time to discuss in pairs, then ask one pair of girls to explain their solution.

Kiri gets the bus to work each morning.

The bus departs at 7.30am and drives 20 km per hour.

Kiri gets off the bus at 8am

How far does Kiri travel to work?

5. Read the problems again and record each piece of information in a table (as above) to help the girls understand the problems and find the answer.

Independent work

20 minutes

Ask the girls to turn to page 35 in their workbooks.

- 1. Divide the girls into five groups.
- 2. Give each group one row on the table and ask them to decide what the missing information is and to be ready to explain how they found the answer.
- As each answer and explanation is given, ask girls to put their thumbs up/down to agree/disagree. Once the answer is agreed, the girls can put the answer in their workbook.



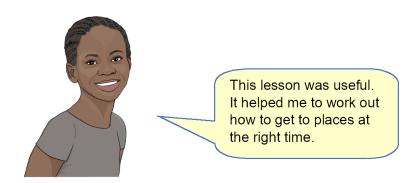
	Transport	Distance	Time	Speed
Group 1	Walk	12 km	3 hours	
Group 2	Walk		2 hours	3 km per hour
Group 3	Bicycle	20 km		10 km per hour
Group 4	Bicycle		3 hours	7 km per hour
Group 5	Bus	100 km	4 hours	

- 4. Now give the girls a few minutes to look at the map of Zimbabwe and talk about what they can see, any places they have heard about and explore the images.
- 5. The girls should be encouraged to share the map at home and answer the questions.

Assess

Listen carefully to the explanations the girls give to each answer and make notes about what they know or understand.

Reflect





Unit 4: Let's plant seeds

Many SAGE girls live in rural communities and work together to farm and vend. Encouraging girls to collaborate is a useful life skill; whatever the girl's transition pathway – whether she is going into business or employment, or returning to school – she will be part of a team working towards a common goal. Ask the girls how they collaborate in the community and at home.

Learning objectives

Literacy/Learning English

- To listen to and understand a story in the home language
- To respond to questions about the text
- To develop skills in reading, understanding and writing short sentences
- To develop knowledge of the relationships between letters and sounds
- To develop skills in reading single words
- To develop vocabularies in English
- To develop skills in reading, understanding and creating short factual texts
- To understand a set of instructions
- To create a set of instructions

Numeracy

- To revise understanding of place value for numbers less than 1000
- To begin to understand place value for numbers greater than 1000
- To learn some strategies for estimation
- To solve problems involving addition and subtraction of up to four-digit numbers
- To multiply and divide whole numbers by ten and one hundred
- To name three- and four-digit numbers in English
- To solve real-life problems involving metres and centimetres
- To convert metres to centimetres and vice versa

Subject and activity number	Activity	Time (mins)
	Session 1	
Literacy 4.1	The unit story	30
Learning English 4.1	Writing short sentences	25
Numeracy 4.1	Making numbers	25
Numeracy 4.2	Strategies for estimation	35
	Session 2	
Learning English 4.2	Match the syllables	10
Literacy 4.2	Working with a short factual text	40
Numeracy 4.3	Multiplying and dividing by 10 and 100	25
Numeracy 4.4	Working with centimetres and metres	40



Unit 4: Session 1

Literacy activity 4.1: The unit story

30 minutes

Plan

Write the learning objectives and key vocabulary on the board.

Learning objectives

For all girls:

- To listen to and understand a story in the home language
- To respond to questions about the text

Some girls will be able:

To read and understand a story in English and write answers to questions about it

Key vocabulary

plant seeds, washed away, bad weather, crops

Do

Point to the learning objectives and tell the girls what they are learning in this activity.

Follow the instructions given in Units 1 and 2.

Assess

Choose six different girls to tell you the answers in their home language or English. They must tell you *why/how* they know that is the correct answer by referring back to the text. Record in your **Progress Book** the girls' achievement.

Answers for Unit 4: C 1 Bad weather is coming. 2 If it's best to plant the seeds before or after the bad weather. 3 Everybody works together. 4 Find out when it'll be best to plant the rest of the seeds, and if they have to do it in a hurry before the bad weather, they'll ask everybody to work together. **D** 1 dressmaker, 2 seeds, 3 plant, 4 in a hurry

Reflect

Some girls have been absent from my sessions. I do not have information in my **Progress Book** about their reading.

I had the same situation. To solve this, I looked at my **Progress Book** and noticed the gaps. In the next session I focused on the girls with missing information.







Learning English activity 4.1: Writing short sentences

25 minutes

Plan

Write the learning objective on the board.

Learning objective

• To develop skills in reading, understanding and writing short sentences

Do

Point to the learning objective and tell the girls what they are learning in this activity.

Guided work

10 minutes

Follow the instructions given for **Learning English activity 2.1: Writing short sentences**, but use sentences starting *I can* _____ and *We can* _____. For example: *I can ride a bike. We can count to 1 000.*

Independent work

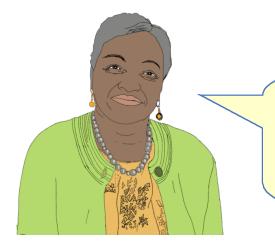
15 minutes

- 1. Ask the girls to turn to page 41, part E in the workbook and complete the writing task.
- 2. Some girls may be able to complete the additional story writing task.
- 3. Ask for volunteers to read their writing to the group.

Assess

Repeat the assessment from Learning English activity 2.1: Writing short sentences.

Reflect



Before I started the activity, I looked at my **Progress Book**. Many of the girls needed help using full stops and capital letters. At the start of the activity, I demonstrated on the board how to include these things in writing.



Numeracy activity 4.1: Making numbers

25 minutes

Plan

Write the learning objectives and key vocabulary on the board.

Learning objectives

- To revise understanding of place value for numbers less than 1000
- To begin to understand place value for numbers greater than 1000

Key vocabulary

thousands, hundreds, tens, ones

Each girl will need:

✓ a sheet of A4 paper.

Do

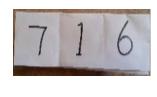
Point to the learning objectives and tell the girls what they are learning in this activity.

Guided work

10 minutes

- 1. Ask each girl to fold their paper into 12 equal sections and write any single digit (0–9) in each section. This is their 'number maker'.
- 2. Now fold the paper (horizontal or vertical) so only three digits are showing. This makes a three-digit number.
- 3. Ask the girls to tell the person next to them what number they have made.
- 4. Say:
 - Stand with all the girls who have the same number of hundreds as you.
 - Find someone whose number is less than one hundred bigger or smaller than yours.
 - Stand with all the girls who have the **same number of tens** as you.
 - Get into groups of three. Put yourselves in order from the smallest to the biggest number.
- 5. Put the girls into small groups of similar attainment with their paper.









Independent work

10 minutes

1. Now show how to fold the paper to make a four-digit number (making sure those four digits are the only ones visible). Ask the girls to do the same.



- 2. Ask what is the same and what is different about three- and four-digit numbers. Make sure all the girls understand that the first digit is now thousands, followed by hundreds, tens and ones.
- 3. Ask the girls to turn to page 44 in their workbooks, number 1.
- 4. Read the instructions and questions together before they work through the tasks.
- 5. If there is time, ask the girls to make another number and allow them to work through the tasks again.

Keep the number makers – you will use them again in later sessions.

Assess

5 minutes

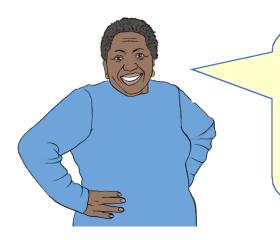
Ask the girls hold up their number when appropriate as you say, for example:

Show me your number if it has:

- three hundreds
- seven ones
- six thousands
- two tens
- more than five hundreds
- less than nine tens
- more than three thousands.

These are just examples and should be adapted as needed. You can design the questions specially to target girls that you are not sure about. Note which girls struggle, so you can give them more help in the future.

Reflect



I noticed that one group of girls were not confident with three-digit numbers. I asked them to carry on making three-digit numbers instead of moving on to four-digit numbers. They answered the same questions except they looked for others in the group who had a number less than 100 bigger or smaller than theirs.



Numeracy activity 4.2: Strategies for estimation

35 minutes

Plan

Write the learning objectives and key vocabulary on the board.

Learning objectives

- To learn some strategies for estimation
- To solve problems involving addition and subtraction of up to four-digit numbers

Key vocabulary

estimate, calculate

You will need:

- √ two sets of digit cards (showing 4–9) for each group of four/five girls
- ✓ all numeracy resources (bead strings, place-value charts and counters etc.).

Do

Point to the learning objectives and tell the girls what they are learning in this activity.

Explain how estimation differs from calculation and why it can be important (for example to have an idea what an answer should be).

Guided work

15 minutes

- Explain that finger millet seeds are very small and are sold by weight. Buying seeds in bulk, for example in a cooperative, is usually cheaper.
- 2. Say that two families use 55 g of seed each and another uses 45 g (write these on the board).
- 3. Ask the girls to estimate roughly how much seed will be needed.
- 4. Discuss strategies to do this:
 - What do they already know? What numbers are easier to work with?
 - For example, all the amounts are close to 50, and 3 x 50 = 150. SO the answer should be around 150.
- 5. Ask them to find the exact answer using any strategy. (55 g + 55 g + 45 g = 155 g)
- 6. Repeat with four families, using 47 g, 53 g, 65 g and 75 g of seed.
- 7. Ask the girls to estimate the difference between the two answers (155 and 240) and discuss strategies.
- 8. In pairs, the girls should use any resources they find helpful to find the exact difference. How did they do it? How close was their estimate?





Independent work

20 minutes

1. In groups of four to five, each girl should turn over two cards. This is the amount of seed they have.

5 7

- 2. The girls should **estimate** the total of all the numbers and discuss how they got their estimate.
- 3. They now calculate the total and compare it to their estimates.
- 4. Mix up the cards and repeat.
- 5. For girls who need more challenge, give out extra cards to make three- or four-digit numbers.
- 6. At the end, look at the cartoon in the workbook (page 44) and discuss.

Assess

Observe the strategies girls are using to estimate, for example rounding or using known number facts. If they are using strategies like this, they are developing a good sense of number. Others may need more practice. Some of the games from earlier modules might help.

Reflect



I always thought estimating was just guessing, and to begin with my guesses were not very accurate. Miracle explained that she looked at the numbers and thought about things she already knew that could help, such as knowing that 50 + 50 = 100. My estimates are much closer now!



Unit 4: Session 2

Learning English activity 4.2: Match the syllables

10 minutes

Plan

Write the learning objectives on the board.

Learning objectives

- To develop knowledge of the relationships between letters and sounds
- To develop skills in reading single words
- To develop vocabularies in English

You will need:

✓ to write the halves of the words on the board/chart in two columns:

teach	ball
mor	band
hus	er
thir	ning
doc	ty
foot	tor

Do

Point to the learning objectives and tell the girls what they are learning in this activity.

Independent work

10 minutes

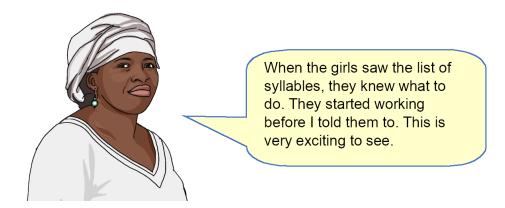
- 1. In pairs, the girls must try to find the words. When they have found as many as they can, they compare their words with another pair.
 - Answers: teacher, morning, husband, thirty, doctor, football
- 2. Go over the words, getting the whole group to say them together and checking everybody understands the meanings. Use **Put a word in context** and **Draw a picture** activities to explain the meaning of the words (see page 3).
- 3. Choose six pairs of girls to stand at the front. Give each pair the first syllable of a word and ask the pair to finish with the second syllable. Let the girls talk to each other before giving the answer.

Assess

Note in your **Progress Book** which pairs of girls found this easy and which girls struggled. Next time you will need to support the girls who were struggling. Talk to the learning assistant about which girls she noticed found this a difficult task.



Reflect



Literacy activity 4.2: Working with a short factual text

40 minutes

Plan

Write the learning objectives on the board.

Learning objectives

- To develop skills in reading, understanding and creating short factual texts
- To understand a set of instructions
- To create a set of instructions

Do

Point to the learning objectives and tell the girls what they are learning in this activity.

Guided work

10 minutes

Ask the girls to look again at the unit story on page 37 in their workbooks. Then follow the instructions as given for **Literacy activity 3.2: Working with a short factual text** on page 42 of this book.

Independent work

30 minutes

- 1. Working in pairs, the girls read the instructions in part F and draw a picture or diagram to go with each one. These could be very simple (for example, just dots to represent the planting holes) or more ambitious, depending on the girls' drawing skills. Visit the pairs, and help anybody who is struggling.
- 2. Each pair compares their work with another pair. Do they agree that all their pictures match the instructions?
- 3. Each pair chooses a topic for part G. They discuss their ideas for the various stages involved in doing their chosen task. Then they draw simple pictures. (If they need



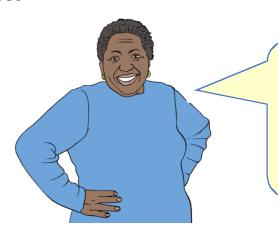
more than six stages, they can use the write-in pages at the back of the book.) Ideally, they will write the sentences too, but if that is too challenging, they can just do the pictures. Visit the pairs, and help anybody who is struggling. Assist them by translating into the home language if necessary.

- 4. Put pairs who chose the same task together. They compare their instructions, and see if they agree with them. Pairs who were the only ones to choose their task also work with another pair, and compare their instructions.
- 5. Ask for volunteers to share their instructions with the group. To make this activity harder, ask the girl to read the instructions and the other girls have to guess what they are the instructions for.

Assess

Repeat the assessment from Literacy activity 3.2: Working with a factual text.

Reflect



When I did this activity, some girls said, 'I can't draw'. I said, 'OK, you don't have to draw if you don't want to, but why don't you at least try?' So they did. Some of their drawings were very basic, but that didn't matter at all for the activity. I think they felt a good sense of achievement for completing the activity.

Learner's Self-Study Workbook

5 minutes

Ask the girls to read the Unit 5 story, and answer the questions about it if they can.

Numeracy activity 4.3: Multiplying and dividing by 10 and 100

25 minutes

Plan

Write the learning objectives and key vocabulary on the board.

Learning objectives

- To multiply and divide whole numbers by ten and one hundred
- To name three- and four-digit numbers in English



Key vocabulary

place holder

You will need:

for guided work:

- ✓ four chairs at the front facing the rest of the group
- ✓ a set of large 0–9 digit cards
- ✓ large cards with 'Thousands', 'Hundreds', 'Tens', 'Ones' written on
- ✓ two extra 0 cards.

for independent work (per group):

- ✓ a place-value chart up to 1000 (this could be drawn on paper or in the dust)
- ✓ a set of 0–9 digit cards plus extra 0 cards.

Do

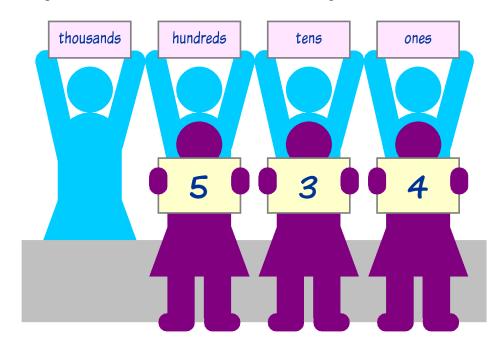
Point to the learning objectives and tell the girls what they are learning in this activity.

Guided work

10 minutes

Part 1: Multiplying and dividing by 10

1. Ask seven girls to sit and stand as shown in the diagram.



2. Explain that when multiplying by ten all the digits move one place to the right. Ask the three girls to move across one chair, leaving an empty chair in the ones column.



- 3. Give another girl a '0' and ask her to sit on the empty chair. This 0 is called a 'place holder' as it fills in the empty space. The number is now 5340. Say, 'Five hundred and thirty-four multiplied by ten is five thousand, three hundred and forty'.
- 4. Now say that you are going to divide 5340 by 10. The girls will all move one place back to where they began. The place holder is not needed, so she moves away.

Part 2: Multiplying and dividing by 100

- 1. Ask another two girls to sit on the chairs, giving them each a digit card.
- 2. Ask the group what you think will happen to the number if you multiply it by 100. The girls will all have to move across two chairs, leaving two empty.
- 3. Give two more girls '0' cards and ask them to be place holders.
- 4. Demonstrate dividing the number by 100 by reversing the process. The place holders are not needed, so they move away.

Independent work

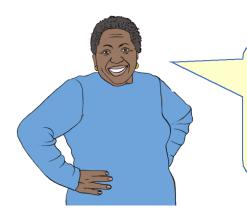
15 minutes

- 1. Girls should sit in groups of 4–6 with a place-value chart and a set of digit cards.
- 2. Call 'two hundred and fifty-seven' and ask each group to put the digit cards in the correct columns on their place-value charts.
- 3. Call, 'Multiply by ten!' The girls should move their digit cards one column to the left and add a place holder.
- 4. Ask the girls, in their groups, to tell each other the multiplication sentence 'Two hundred and fifty-seven multiplied by ten is two thousand, five hundred and seventy'.
- 5. Repeat with the following: 73 x 100, 720 ÷ 10, 435 x 10, 89 x 100 and 8600 ÷ 100.

Assess

Watch the girls as they make the numbers and move them. Which girls are taking a lead in the group? Which ones are hesitant? Watch and listen as they say the number sentences. Some girls may be confident in calculating, but might need more practice saying the numbers in English.

Reflect



I had to practise the chair activity with my family before I did it with the girls – I got confused about which way the girls had to move to multiply or divide to begin with! It did help the girls see what happens to the numbers when you multiply or divide by ten and one hundred though.



Numeracy activity 4.4: Working with centimetres and metres

40 minutes

Plan

Write the learning objectives on the board.

Learning objectives

- To solve real-life problems involving metres and centimetres
- To convert metres to centimetres and vice versa

You will need:

- ✓ to draw a 3-metre-long 'field' in the dust outside or on the floor
- √ a 30-cm ruler or a measuring tape
- ✓ all maths resources (including place-value charts and counters)
- ✓ to write 'Field lengths' on the board (3 m, 9 m, 12 m, 5 m and 7 m).

Field lengths

3 metres

9 metres

12 metres

5 metres

7 metres

Do

Point to the learning objectives and tell the girls what they are learning in this activity.

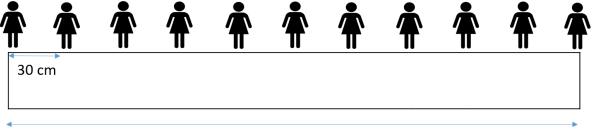
Tell the girls that to get a good harvest from maize or finger millet, the rows need to be 30 cm apart. Explain you are going to find out how many rows can fit on different plots of land.

Guided work

20 minutes

Part 1 (10 minutes)

- 1. Ask the girls to stand around the field you have drawn. Tell them it is 3 m long.
- 2. Ask one girl to stand at the corner. Measure 30 cm from her and ask another girl to stand there to mark the spot. Repeat until you reach the other corner.



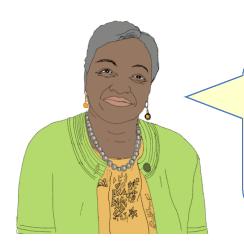
3metres

- 3. Count the number of girls (10), so there are 10 rows of seeds.
- 4. Ask the girls if they can think of a way to find out how many rows there would be without measuring and counting. Ask them to think about what they need to know to be able to do this. (that there are 100 cm in a metre)



Part 2 (10 minutes)

- 1. Write '100 cm = 1 m' on the board.
- 2. Ask the girls to share their ideas for finding the number of rows for the 3 m field. For example, they could count in 30s to 300, as 3 metres is the same as 300 cm. Or they could draw a diagram and mark off groups of 30, adding each thirty to the total until they reach 300.
- 3. Discuss the ideas. Which are quicker or easier? Ask if the method would work for any size of field.

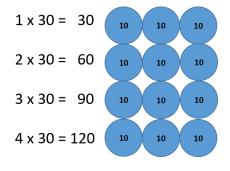


Some girls realised that they need to multiply metres by 100 to find the number of centimetres. I chose them to explain their ideas! I was also looking out for girls who used division to find the solution, and those who used repeated subtraction on a number line. Some girls came up with unexpected methods — I had to get them to explain them and discuss why they did or did not work.

Independent work

20 minutes

- 1. Put the girls in pairs of similar attainment. Ask them to choose a field size from the list on the board and work out the number of seed rows. Encourage higher achievers to start with 5 m or 7 m, as these will not divide equally.
- 2. They should aim to find a solution for one or two fields using any method they choose.
- 3. Listen and offer support as they work. Encourage them to try more efficient methods.
- 4. After 10 minutes, ask the girls to share their solutions. Draw attention to the fact that some fields would have a little bit of land left over, as not all the numbers divide equally by 30.
- 5. Help the girls see the link between multiplying by 3 and multiplying by 30. Make arrays with 'tens' place-value counters, adding one row at a time.
- 6. Some girls can try the extra problem on page 44 of the workbook, or try these at home if they like.



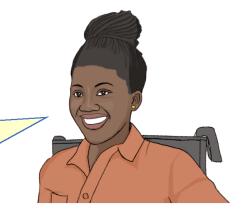
Assess

This activity helps you see which girls can use what they know to solve problems. It will show you which girls understand multiplying by 10 and 100, and which ones are able to use the division method they learned in Module 1c for bigger numbers.



Reflect

This made me think! We had to work out whether to add, subtract, multiply or divide to get the answer. We had to think about converting metres to centimetres before we could find the answer as well!





Unit 5: Rose the accountant

At the mid-point of the module you will notice that girls are being encouraged to do more writing. Some girls will find this easy, but others will need more help. Use *Independent* work time to support girls who are struggling. Encourage higher-attaining girls to help other girls, or to practise reading the simple texts at the back of the workbook.

Learning objectives

Literacy/Learning English

- To listen to and understand a story in the home language
- To respond to questions about the text
- To develop knowledge of the relationships between letters and sounds
- To develop skills in reading and writing single words
- To develop vocabularies in English
- To develop skills in reading, understanding and creating short factual texts
- To work with words and phrases that are useful when looking for and applying for a
 job

Numeracy

- To understand the relationship between tens, ones and tenths
- To understand more about decimal numbers
- To multiply and divide decimal numbers by 10 and 100
- To understand the difference between hundreds and hundredths, tens and tenths

Subject and activity number	Activity	Time (mins)				
Session 1						
Literacy 5.1	The unit story	30				
Learning English 5.1	Read and write words	25				
Numeracy 5.1	Decimals and fractions – tens, ones and tenths	35				
Numeracy 5.2	What is a decimal? Place-value counters	25				
	Session 2					
Learning English 5.2	Find the words	15				
Literacy 5.2	Working with a short factual text	50				
	Learner's Self-Study Workbook	5				
Numeracy 5.3	Move along, please!	60				



Unit 5: Session 1

Literacy activity 5.1: The unit story

30 minutes

Plan

Write the learning objectives and key vocabulary on the board.

Learning objectives

For all girls:

- To listen to and understand a story in the home language
- To respond to questions about the text

Some girls will be able:

To read and understand a story in English and write answers to questions about it

Key vocabulary

accountant, co-worker, workshop, complicated, afford

Do

Point to the learning objectives and tell the girls what they are learning in this activity.

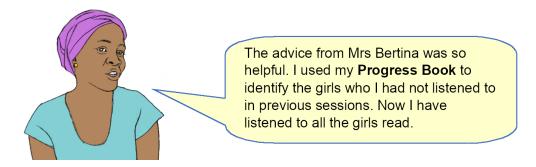
Follow the instructions given in Units 1 and 2.

Assess

Choose six different girls to tell you the answers in their home language or English. They must tell *why/how* they know that is the correct answer by referring back to the text. Record in your **Progress Book** the girls' achievement.

Answers for Unit 5: C 1 True, 2 True, 3 True, 4 False, 5 False, 6 False (one day a month), 7 True (and also ask other people); **D** 1 co-workers, 2 complicated, 3 material, 4 equipment, 5 afford, 6 accountant

Reflect





Learning English activity 5.1: Read and write words

25 minutes

Plan

Write the learning objectives on the board.

Learning objectives

- To develop knowledge of the relationships between letters and sounds
- To develop skills in reading and writing single words
- To develop vocabularies in English

You will need:

✓ to write these sounds on the board:

oo ow ea oi er a-e i-e o-e

Do

Point to the learning objectives and tell the girls what they are learning in this activity.

Refer back to the instructions given for **Read and write words** Part 1 and Part 2 They are written in full for Units 1 and 3.

For Part 1, the girls open their workbooks to part E, page 50.

For Part 2, the girls open their workbooks to part F, page 50.

You will need these words for part F:

oo (as in soon, too, moon, rooster)
 ow (as in town, brown, towel, now)
 ea (as in sea, steal, each, treat)
 oi (as in spoil, coin, noise, choice)
 er (as in river, person, perfect, farmer)
 a-e (as in late, plane, brave, stale)
 i-e (as in like, mine, smile, write)
 o-e (as in hope, wrote, stone, whole)

Assess

Before the session, choose six girls to focus on. Record which English words these girls already know, and which were new to them. Record this in your **Progress Book**.





This was the third time the girls had done this activity format. They remembered how it worked, and did it with increased confidence. It also meant I didn't have to spend any time explaining how it worked.



Numeracy activity 5.1: Decimals and fractions – tens, ones and tenths

35 minutes

Plan

Write the learning objective and key vocabulary on the board.

Learning objective

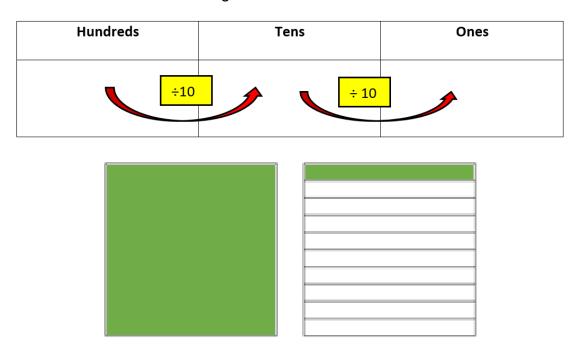
• To understand the relationship between tens, ones and tenths

Key vocabulary

tenth, equivalent, decimal

You will need:

✓ to draw the diagrams below on the board or flipchart paper; leave enough space to draw another column to the right for tenths



✓ to write these numbers on the board.

✓ Set 1	1,3	1,6	1,8	1,9
✓ Set 2	1,5	0,2	0,6	1,0

Do

Point to the learning objectives and tell the girls what they are learning in this activity.

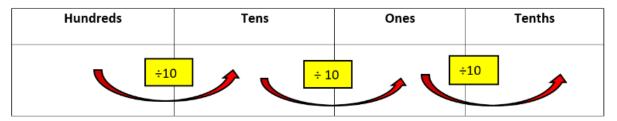


Guided work

20 minutes

Part 1: The exchange rule

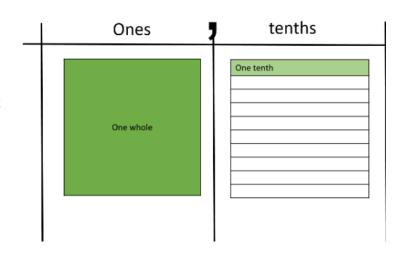
1. Show the girls the hundreds, tens and ones chart.



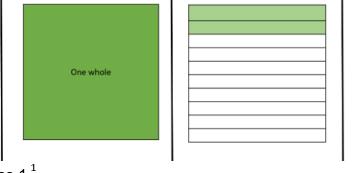
- 2. Discuss as a group what it shows. You can exchange one hundred for ten tens, and one ten for ten ones. When you move one column to the right, you divide by 10. It may help to remind the girls of the chairs activity from Unit 4.
- 3. Add another column to the right of the ones and label it 'tenths'.
- 4. Add '÷10' and an arrow. Explain that the rule still works for decimal numbers. This is important to remember.

Part 2: What is a tenth?

- Point to the square on the board – remind the girls this is a whole shape.
- 2. Point to the shaded fraction and ask girls to discuss what it is. (one tenth) How do they know? (A whole shape has been divided into 10 equal parts)
- 3. Write $\frac{1}{10}$ on the board. Draw a place-value chart around the shapes (as shown).
- 4. Ask the girls:
 - to discuss together what number you have made (1,1)
 - what column might be to the right of 'tenths'? (hundredths)
- 5. Explain the number is 'one point one' as there is one whole and one tenth. It is the same as $1\frac{1}{10}$.
- 6. Shade another tenth. Write: 1 whole + 2 tenths = 1,2 or $1\frac{2}{10}$



Ones



tenths



Independent work

15 minutes

- 1. Put the girls in pairs of similar attainment.
- 2. The girls should shade the diagrams on page 52 of the workbook, writing the number of whole numbers and tenths underneath as in the example. Some girls can also write the number as a fraction and a decimal.
- 3. Point to the sets of numbers on the board. Some girls should do Set 1; higher-achieving girls should do Set 2.
- 4. Ask the girls to compare their answers with another pair who did the same work. If their answers differ, they should work out together who is right and why!
- 5. If they would like to, the girls can continue this activity at home, making up their own decimal numbers.

Assess

Check that girls are shading the boxes in the correct column. This will show you that they understand the relative values of ones and tenths.

Reflect



It was interesting watching the girls doing this. I had assumed that moving from whole numbers to decimal numbers would be easy, but some girls really found it hard.

Numeracy activity 5.2: What is a decimal? Place-value counters

25 minutes

Plan

Write the learning objective on the board.

Learning objective

• To understand more about decimal numbers

Each team will need:

- √ 6 x 0,1 place-value counters (the '0,1' needs to be underlined otherwise they may be mistaken for 1,0)
- √ 6 x 1 place-value counters
- √ 6 x 10 place-value counters



- ✓ A large place-value chart showing tens, ones and tenths; can be on large sheets of paper or drawn on the ground
- ✓ a set of digit cards and a card with a decimal point written on.

You will need:

✓ a collection of pebbles or large seeds.

NOTE: If you do not have enough bottle tops to make place-value counters, use squares of paper.

Do

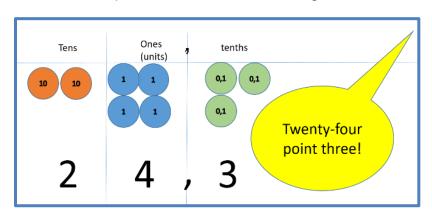
Point to the learning objectives and tell the girls what they are learning in this activity.

Guided work

Part 1

10 minutes

1. Show the girls how to play the game. Choose a pair of girls to each stand by a place-value chart with a set of place-value counters and digit cards each.



- 2. Each pair should try to make the number you call out as quickly as possible. One should make it with place-value counters, and the other with the digits and decimal point.
- 3. Call 'twenty-four point three'. Give the quickest pair a pebble.

Part 2

15 minutes

- 1. Organise the girls into four teams of mixed attainment, each lined up by a placevalue chart.
- 2. Play the game with pairs of girls in each team taking turns.
- 3. The team with the most pebbles at the end of the game is the winner.



Numbers to call:

35,1	21,6	54,3	42,5	31,2	65,4
32,4	14,6	5,6	13,5	46,3	6,2

Reflect

I think I'm beginning to get decimal numbers now – the place-value rules are the same as they are for ones, tens and hundreds!



Assess

Watch as the girls play and note those who are confident and those who may need extra support.



Unit 5: Session 2

Learning English activity 5.2: Find the words

15 minutes

Plan

Write the learning objectives on the board.

Learning objectives

- To develop knowledge of the relationships between letters and sounds
- To develop skills in reading single words
- To develop vocabularies in English

Do

Point to the learning objectives and tell the girls what they are learning in this activity.

Guided work

This is similar to **Learning English activity 1.2: Find the words**, but this time you will read the following groups of letters out to the girls rather than writing them on the board:

nesd esrt pord pots

Answers: send, rest, drop, stop/post

- 1. Ask the girls to turn to the lined paper at the back of their workbooks (page 106).
- 2. Say that you are going to read out four letters they have to write down. Read out the first four letters -n, e, s, d.
- 3. Ask the girls to work with their partner to find the word. The first pair of girls to put their hands up wins three points, the next pair wins two points and the third pair wins one point. [This will be a very quick game, so give out lots of points to the girls. This will make the activity fun and active.]
- 4. Repeat for the next two words. The girls' hands will go up very quickly, so make sure different girls are awarded points.
- 5. For the final word, girls may notice that *pots* is already a word. Ask them to find **two** new words.

Assess

Repeat the assessment from **Learning English activity 1.2: Find the words**.



Reflect

This was a fun game. Their hands went up so quickly, I almost lost count! I made sure I gave points to different pairs. The game encouraged me to notice different girls.



That is a fun game. I will try it with my own group next time.





Literacy activity 5.2: Working with a short factual text

50 minutes

Plan

Write the learning objectives on the board.

Learning objectives

- To develop skills in reading, understanding and creating short factual texts
- To work with words and phrases that are useful when looking for and applying for a job

Do

Point to the learning objectives and tell the girls what they are learning in this activity.

Guided work

10 minutes

Ask the girls to look again at the unit story on page 45 in their workbooks. Then follow the instructions as given for **Literacy activity 3.2: Working with a short factual text**.

Independent work

30 minutes

- 1. Working in pairs, the girls read the job advertisements in part G, and answer the questions. Visit the pairs, and help anybody who is struggling. When they have finished, they compare their answers with another pair, and check them again.

 Answers: G offer asking if somebody wants something, experienced you have done it a lot in the past, part-time only working for some of the time each week, assistant helper, seeker a person who is looking for something, qualified you have passed an exam
- 2. Still in their pairs, the girls produce their own job advertisements, and write them in part H. Encourage everybody to do this, but anybody who feels they can't do it can compose one orally instead. Visit the pairs, and help anybody who is struggling. Assist them by translating into the home language if necessary.

Guided work

10 minutes

- 1. At the end of the session, the job advertisements are laid on tables. Ask the girls to walk around the room and read them.
- 2. Each girl must choose one job she likes, and would like to apply for. In pairs, girls tell each other what job they would like to apply for and their reasons.
- 3. Choose three pairs of girls. Ask them to tell the group which job they would like to apply for and their reasons.



Assess

Repeat the assessment from Literacy activity 3.2: Working with a factual text. You may also want to note down the names of girls who did very well or those who needed support with their speaking and listening.

Reflect



Several of the words in the advertisement were new to the girls. It wasn't easy for me to help them to understand the meanings, but I think it was worth it. They're very useful words to know if you ever need to apply for a job.

Learner's Self-Study Workbook

5 minutes

Ask the girls to read the Unit 6 story, and answer the questions about it if they can. Also encourage the girls to find the rhyming words in the story for Unit 5.

Numeracy activity 5.3: Move along, please!

60 minutes

Plan

Write the learning objectives on the board.

Learning objectives

- To multiply and divide decimal numbers by 10 and 100
- To understand the difference between hundreds and hundredths, tens and tenths

You will need:

For guided work

- ✓ five chairs at the front facing the rest of the group
- ✓ a set of large 0–9 digit cards and extra 0 cards
- ✓ a large decimal point card
- ✓ large cards with 'Hundreds', 'Tens', 'Ones', 'tenths' and 'hundredths' written on.



For independent work (per group)

- ✓ a place-value chart showing Hundreds, Tens, Ones, decimal point, tenths and hundredths (on paper or on floor)
- ✓ a set of 0–9 digit cards plus extra 0 cards.

Hundreds	Tens	Ones	tenths	hundredths

Do

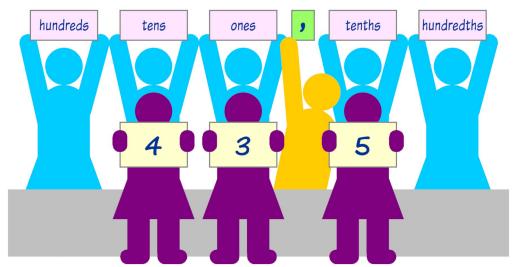
Point to the learning objectives and tell the girls what they are learning in this activity.

Guided work

Part 1

15 minutes

- 1. Ask two girls to hold up the 'Tens' and 'tenths' cards. Ask: 'What is the same, what is different?' Make sure the girls realise that 'Tens' are whole numbers, 'tenths' are decimals.
- 2. Repeat with 'Hundreds' and 'hundredths'.



3. Arrange six girls behind five chairs as shown (three more will sit down later).



4. Remind the girls that a '1' in each column is worth ten times more than a '1' in the column to the right. One hundred is ten times more than one ten. And one tenth is therefore worth ten times more than one hundredth (this can sometimes cause confusion).

Part 2

15 minutes

- 1. Give three girls the numbers 4, 3 and 5 and ask them to sit in the 'Tens', 'Ones' and 'tenths' chairs.
- 2. Ask girls to discuss what number has been made. (43,5)
- 3. Say you are going to multiply the number by 10. Ask for suggestions as to what the girls might need to do. (Move one seat over so the number reads 435)
- 4. Ask:
 - Did the decimal point move? (No)
 - Do you need a place holder? (No, because there are no empty spaces before the decimal point)
- 5. Ask the girls to move back to their original places and repeat for multiplying by 100 (moving two spaces to make 4350). Note that you DO now need a place holder as there is a space before the decimal point.
- 6. Repeat the process in reverse, dividing by 10 and 100.

Independent work

20 minutes

- 1. Organise the girls into groups of four/five.
- 2. As you call the numbers below, the girls should make them on their place-value charts.
- 3. When you say 'multiply by 10', 'multiply by 100', 'divide by 10' or 'divide by 100' they should move the digits accordingly and add a place holder if needed.

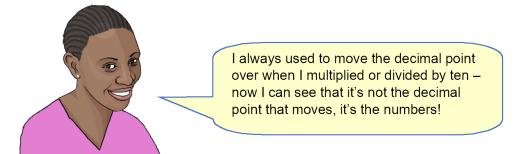
47,5 x 10	26,3 x 100	2,64 x 10	5,73 x 100
253 ÷ 100	36,5 ÷ 10	45,36 x 10	217,3 ÷ 10

Assess

10 minutes

Ask the girls to look at page 52 of their workbook. In pairs they should discuss which of the girls is right, and what misunderstanding the other girls might have. [**Note:** the third girl thinks that when you multiply by ten you just add a zero. This does not work for decimal numbers. The first girl has added ten instead of multiplying.]

Reflect





Unit 6: Glory the designer

The idea for this unit comes from one of our SAGE girls. A girl at one hub drew a picture of a house she wanted to design and you can see her picture on the last page of the Learner's Self-Study Workbook. If girls in your hub have stories to share, then please give them to the SAGE district coordinator to share with the writing team.

Learning objectives

Literacy/Learning English

- To listen to and understand a story in the home language
- To respond to questions about the text
- To develop skills in reading, understanding and writing short sentences
- To develop knowledge of the relationships between letters and sounds
- To develop skills in reading single words
- To develop vocabularies in English
- To develop skills in reading, understanding and creating short factual texts
- To work with words and phrases that are useful when talking about building something

Numeracy

- To visualise the size of a square metre
- To find perimeters of rectangles and squares
- To find area of rectangles and squares
- To find the perimeter of composite shapes
- To find the area of composite shapes
- To solve real-life problems involving measurement of length
- To convert metres to centimetres and centimetres to metres
- To use multiplication in a real-life context

Subject and activity number	Activity	Time (mins)					
	Session 1						
Literacy 6.1	The unit story	30					
Learning English 6.1	Writing short sentences	25					
Numeracy 6.1	How big is a square metre?	10–15					
Numeracy 6.2	Area and perimeter	45					
	Session 2						
Learning English 6.2	Match the syllables	10					
Literacy 6.2	Working with a short factual text	40					
	Learner's Self-Study Workbook	5					
Numeracy 6.3	Working with composite shapes	20					
Numeracy 6.4	The cost of building	40					



Unit 6: Session 1

Literacy activity 6.1: The unit story

30 minutes

Plan

Write the learning objectives and key vocabulary on the board.

Learning objectives

For all girls:

- To listen to and understand a story in the home language
- To respond to questions about the text

Some girls will be able:

To read and understand a story in English and write answers to questions about it

Key vocabulary

designer, homestead, hut, metal roof, building

Do

Point to the learning objectives and tell the girls what they are learning in this activity.

Follow the instructions given in Units 1 and 2.

Assess

Check your **Progress Book.** By Week 6, you should have information about all the girls' reading and comprehension skills. In this unit (and units 7, 8, 9 and 10) you will concentrate on the girls' reading in English.

Before the session, choose three pairs of girls. During *Independent work*, sit with one pair of girls. Ask one girl to read a sentence, then the next girl. Record their achievement in your **Progress Book**. Then listen to the next pair and then the next pair, so that you have listened to six girls. This is a quick activity – make it fun for the girls.

Answers for Unit 6: C 1 She is going to help to design a house for her family. 2 They need more space. 3 How big the new building is going to be. 4 She is good with numbers and measurements. **D** 1 design, 2 bricks, 3 roof, 4 measurements

Reflect



I was anxious about listening to girls read in the independent session. However, the other girls were quietly completing their work and some were reading the readable stories in their workbooks.



Learning English activity 6.1: Writing short sentences

Plan

25 minutes

Write the learning objective on the board.

Learning objective

To develop skills in reading, understanding and writing short sentences

Do

Point to the learning objectives and tell the girls what they are learning in this activity.

Guided work

10 minutes

Follow the instructions given for **Learning English activity 2.1: Writing short sentences**, but use sentences starting *I have* _____ and *We have* _____. Note that this refers to things the girls have done at some point in their lives to date (not things they own). For example: *I have seen a giraffe. We have eaten mangoes.*

The sentences could also refer to things they have never done. For example: I have never driven a car. I have never been to Mutare.

Independent work

15 minutes

- 1. Ask the girls to turn to page 57, part E in the workbook and complete the writing task.
- 2. Girls can read their sentences to each other in pair, share.

Assess

Repeat the assessment from Learning English activity 2.1: Writing short sentences.

Reflect



I liked it when Mrs Bertina showed us how to write sentences. I did not know about full stops and capital letters, but now I do.



Numeracy activity 6.1: How big is a square metre?

10-15 minutes

Plan

Write the learning objective and key vocabulary on the board.

Learning objective

• To visualise the size of a square metre

Key vocabulary

square metre

You will need:

✓ to make a square metre from newspaper or draw a square metre on the ground.

Do

Point to the learning objectives and tell the girls what they are learning in this activity.

Guided work

- 1. Gather the girls around the square metre on the ground.
- 2. Explain that the 'area' inside a 1 m x 1 m square is called a 'square metre'.
- 3. Ask the girls to discuss, in pairs, how many of them they think will be able to stand together in the square metre.
- 4. Get them to find out!
- 5. If you have made a square metre out of newspaper, take the sheet outside and find a small area to estimate then measure how many square metres would fit in the space.

Numeracy activity 6.2: Area and perimeter

Plan

45 minutes

Write the learning objectives and key vocabulary on the board.

Learning objectives

- To find perimeters of rectangles and squares
- To find area of rectangles and squares

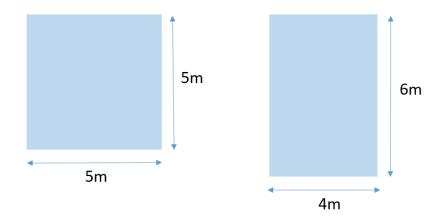
Key vocabulary

area, perimeter



You will need:

✓ to draw the following shapes on the board:



✓ to think about strategies the girls might use to find the perimeter and area of the shapes.

Do

Point to the learning objectives and tell the girls what they are learning in this activity.

Remind the girls of the meaning of *area* and *perimeter*. Area is the space inside a two-dimensional (flat) shape, measured in square units – in this case square metres, written m². Perimeter is the measurement around the edge of the shape.

Guided work

20 minutes

Part 1: Perimeter

- 1. Point to the 5 m x 5 m shape (also on page 58 of the workbook) and explain that this is a plan for a new house. Say you are going to work out the *perimeter* together.
- 2. Ask the girls to 'think, pair, share' ways to find the answer. Choose girls who have different strategies to share.
- 3. Discuss the different suggestions and the pros and cons of each. Which is easiest, which is quickest, which will always work and so on.
- 4. Repeat for the 6 m x 4 m rectangle.
- 5. Ask the girls what they notice (the perimeter is the same for both). Ask if they think the area will also be the same.

Part 2: Area

- 1. Ask the girls, in pairs, to try to find the area of the 5 m x 5 m square. They can use any strategy they like. Remind them that their answer will be in *square* metres (m²).
- 2. Listen as they talk.
- 3. Ask some to demonstrate their different strategies. Check that all girls have the same answer.
- 4. Discuss the pros and cons of different strategies.



5. Repeat with the 6 m x 4 m rectangle.

Independent work

20 minutes

- 1. Explain that Glory has enough bricks to make a building with a perimeter of 20 m. She wants to know which shape would give her the most space inside (area).
- 2. Put the girls in small groups and ask them to sketch different rectangles that would have a perimeter of 20 m. Remind them of the features of a rectangle.
- 3. Now ask them to calculate the area of each of their shapes.
- 4. If some girls finish quickly, ask them to try to find the best (biggest area) square or rectangle for a building that has a perimeter of 28 m.
- 5. There is an additional problem on page 58 of the workbook for the girls to try after the session, if they like.

Assess

5 minutes

Ask the girls what pattern they notice in the relationship between the shape and the area. Let the girls look for a pattern. If none are suggested, prompt them to look at the length and the width. How do they relate to the area? Can they make any rules? (For example, a long thin rectangle has a smaller area than a square with the same perimeter.)

Reflect



I noticed that knowing multiplication facts is really useful for finding the area and perimeter of squares and rectangles!



Unit 6: Session 2

Learning English activity 6.2: Match the syllables

10 minutes

Plan

Write the learning objectives on the board.

Learning objectives

- To develop knowledge of the relationships between letters and sounds
- To develop skills in reading single words
- To develop vocabularies in English

You will need:

√ 12 pieces of paper (A4 size). Write each syllable on a different piece of paper.

hun	cause
quick	dred
child	er
sen	ond
sec	ren
be	tence

Do

Point to the learning objectives and tell the girls what they are learning in this activity.

Independent work

10 minutes

- 1. Ask six higher-attaining girls to come to the front. Give each one a syllable from column 1. The girls should hold up their syllables so the other girls can see.
- 2. Give six syllables from column 2 to girls sitting at tables.
- 3. The first girl at the front must tell the group which syllable she is looking for and which word it will make. For example:
 - My syllable is 'hun' and I am looking for 'dred' to make the word 'hundred'.
- 4. The girl with 'dred' comes to the front and joins her partner. Repeat until you have found all the pairs.
- 5. Repeat the game with different girls.

Answers: hundred, quicker, children, sentence, second, because



Assess

Note in your **Progress Book** which pairs of girls found this easy and which girls struggled. Next time you will need to support the girls who were struggling. Talk to the learning assistant about which girls she noticed found this a difficult task.

Reflect

I enjoy making activities fun and active. This was a very good way of involving all girls. This is a good activity for girls who struggle with reading. They can listen and work out the answers. This will help their reading.





Literacy activity 6.2: Working with a short factual text

40 minutes

Plan

Write the learning objectives on the board.

Learning objectives

- To develop skills in reading, understanding and creating short factual texts
- To work with words and phrases that are useful when talking about building something

Do

Point to the learning objectives and tell the girls what they are learning in this activity.

Guided work

10 minutes

Ask the girls to look again at the unit story on page 53 in their workbooks. Then follow the instructions as given for **Literacy activity 3.2: Working with a short factual text**.



Independent work

30 minutes

- 1. In this unit, the emphasis is more on girls creating their own texts. Working in pairs, they discuss and draw their own designs for a building in part F (page 57), and write words on them. They also complete the sentences that follow if they can. Visit the pairs and help anybody who is struggling. Assist them by translating into the home language if necessary.
- 2. The workbooks are laid on the tables or similar, and everybody can walk around and look at each other's designs.
- 3. Ask the girls to choose the design they like best (they can't choose their own design).
- 4. Ask six girls to tell the group one thing they liked about their own design and one thing they liked about another girl's design.

Assess

Repeat the assessment from Literacy activity 3.2: Working with a factual text.

Reflect

None of my girls had any personal experience of planning a new building, but they enjoyed the creative challenge. And it may be relevant to something they do in the future, even if it is quite a long time in the future.



Learner's Self-Study Workbook

5 minutes

Ask the girls to read the Unit 7 story, and answer the questions about it if they can.

Numeracy activity 6.3: Working with composite shapes

20 minutes

Plan

Write the learning objectives and key vocabulary on the board.

Learning objectives

- To find the perimeter of composite shapes
- To find the area of composite shapes

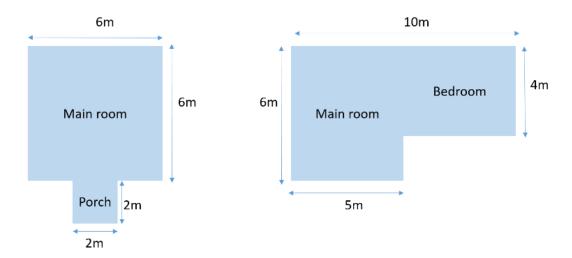


Key vocabulary

composite shape

You will need:

- ✓ to draw the two composite shapes from the workbook (page 58 and below) on the board
- ✓ numeracy resources.



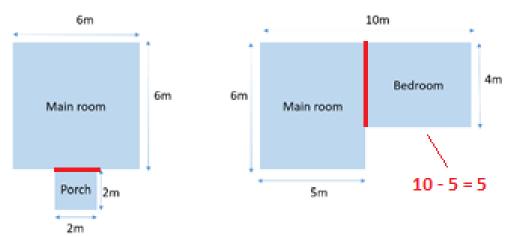
Do

Point to the learning objectives and tell the girls what they are learning in this activity. Make sure they understand the meaning of 'composite shape' (a shape which is made up from two shapes placed together).

Guided work

15 minutes

1. Ask girls to sit in groups and discuss how they got the answers to the composite shape problems (some will have tried it at home, others will try it for the first time now).



2. After five minutes, ask girls who had different strategies to explain to the whole group. Help the girls to explain or demonstrate their method, for example add to the diagram. (the red lines show one strategy for finding the area)



3. Make sure that by the end of this activity all the girls have at least one strategy for finding the perimeter and area of each of the shapes.

Assess

5 minutes

During this and the next activity try to take a look at all the girls' workbooks to see how they got on with the area and perimeter composite shape task. Make a note of anyone who might need a bit more practice.

Reflect



To begin with I thought I couldn't do this, but then I remembered that my Community Educator said, 'Use what you already know!' I realised that each shape could be broken down into 2 rectangles or squares – all I had to do to find the area was to add them together!



Numeracy activity 6.4: The cost of building

40 minutes

Plan

Write the learning objectives on the board.

Learning objectives

- To solve real-life problems involving measurement of length
- To convert metres to centimetres and centimetres to metres
- To use multiplication in a real-life context

You will need:

✓ all numeracy equipment.

Do

Point to the learning objectives and tell the girls what they are learning in this activity.

Guided work

15 minutes

- 1. Ask: 'If each brick is 25 cm long, how many bricks would it take to build one layer all around a 5 m x 5 m building?' Draw a simple sketch of the outline to get the girls started.
- 2. Give the girls a few minutes to discuss their answers, then ask them for their answers and their strategies.
- 3. Now tell the girls the bricks are 10 cm high. As a group, start to discuss how many layers of bricks might be needed to make the building the correct height. Ask: 'What height might that be? How might you then go on to find the number of bricks needed for the building? What other things should you consider?'

Independent work

25 minutes

- 1. Put the girls in groups of 2–4 of about the same attainment.
- 2. The first task is to find out roughly how many bricks would be needed (using the height of building as agreed as a group). Record this on page 59 of the workbook.
- 3. Bricks are often homemade. The second task is to look at the cost of some other building materials and calculate how much Glory would have to pay for different items. The costs are on page 59 of the workbook. The cost of the wire nails has been done as an example. If some girls finish quickly, you could challenge them further by giving them the SAGE super challenge bookmark.
- 4. After 20 minutes, bring the group back together and take some answers from different groups.
- 5. Go through some of the strategies the girls used.



- 6. Discuss what other costs might be involved in building a house (windows, doors/door frames and so on).
- 7. The girls can continue or finish this activity at home if they wish.

Assess

A range of different skills will be needed for this practical task. As you observe the girls working, you will see how well they can use what they know to solve problems. As always, note those who need extra support and think of ways to support them.

Reflect

There are so many things to think about before I can start building my house! I'm so glad I'm getting better with numbers, I will be able to make sure I can afford to complete the building!





Unit 7: Aneni the business owner

SAGE girls tell us that they want to go into business. To help them, the unit story tells how Aneni, the internet café owner, needs to write a business plan to expand her business. The writing task for the girls helps them understand that in order to achieve a goal, you must know the steps to take.

Learning objectives

Literacy/Learning English

- To listen to and understand a story in the home language
- To respond to questions about the text
- · To develop knowledge of the relationships between letters and sounds
- To develop skills in reading and writing single words
- To develop vocabularies in English
- To develop knowledge of the relationships between letters and sounds
- To develop skills in reading single words
- To develop vocabularies in English
- To develop skills in reading, understanding and creating short factual texts
- To write notes to remember things you need to do

Numeracy

- To compare tenths and hundredths
- To understand the value of the digit in the 'hundredths' column
- To understand the connection between fractions, decimals and percentages
- To understand the difference between start-up and operational costs
- To add and subtract amounts of money

Subject and activity number	Activity	Time (mins)					
	Session 1						
Literacy 7.1	The unit story	30					
Learning English 7.1	Read and write words	25					
Numeracy 7.1	Tenths and hundredths	25					
Numeracy 7.2	Fractions, decimals and percentages	35					
	Session 2						
Learning English 7.2	Find the words	15					
Literacy 7.2	Working with a short factual text	40					
	Learner's Self-Study Workbook	5					
Numeracy 7.3	Start-up and operational costs	25					
Numeracy 7.4	Money matters	35					



Unit 7: Session 1

Literacy activity 7.1: The unit story

30 minutes

Plan

Write the learning objectives and key vocabulary on the board.

Learning objectives

For all girls:

- To listen to and understand a story in the home language
- To respond to questions about the text

Some girls will be able:

To read and understand a story in English and write answers to questions about it

Key vocabulary

business plan, lose money, grow a business, worth it

Do

Point to the learning objectives and tell the girls what they are learning in this activity.

Follow the instructions given in Units 1 and 2.

Assess

Before the session, choose three pairs of girls. During *Independent work*, sit with one pair of girls. Ask one girl to read a sentence, then the next girl. Record their achievement in your **Progress Book**. Then listen to the next pair and then the next pair, so that you have listened to six girls. This is a quick activity – make it fun for the girls.

Answers for Unit 7: C 1 False, 2 True, 3 True, 4 True, 5 False, 6 False, 7 True; **D** 1 regular, 2 somebody else, 3 any longer, 4 customer, 5 work out

Reflect





Learning English activity 7.1: Read and write words

25 minutes

Plan

Write the learning objectives on the board.

Learning objectives

- To develop knowledge of the relationships between letters and sounds
- To develop skills in reading and writing single words
- To develop vocabularies in English

You will need:

- ✓ to write these sounds on the board:
- ay ir air ear

aw • oy ow

Do

Point to the learning objectives and tell the girls what they are learning in this activity.

Refer back to the instructions given for **Read and write words** Part 1 and Part 2 They are written in full for Units 1 and 3.

For Part 1, the girls open their workbooks to part E, page 65.

For Part 2, the girls open their workbooks to part F, page 65.

You will need these words for part F:

```
ay (as in stay, play, way, pay) ● ir (as in bird, shirt, first, thirteen)
```

air (as in pair, fair, air, stairs) • ear (as in near, fear, dear, clear)

aw (as in saw, draw, yawn, raw,) • oy (as in boy, toy, enjoy, destroy)

ow (as in show, throw, know, yellow) • ou (as in shout, loud, about, cloud)

Assess

Before the session, choose six girls to focus on. Record which English words these girls already know, and which were new to them. Record this in your **Progress** Book.

Reflect



I enjoy trying out the different strategies for **Learning the meaning of new words** (page 3). It is very helpful for the girls in understanding these new and challenging words.



Numeracy activity 7.1: Tenths and hundredths

25 minutes

Plan

Write the learning objectives and key vocabulary on the board.

Learning objectives

- To compare tenths and hundredths
- To understand the value of the digit in the 'hundredths' column

Key vocabulary

hundredths

You will need:

✓ to draw the following on the board before the session:



✓ to write these numbers on flipchart paper, to be used during *Independent work*.

Set 1	1,65	1,28	1,54
Set 2	1,58	0,27	1,06
Set 3	0.39	1.04	0.4

Do

Point to the learning objectives and tell the girls what they are learning in this activity.

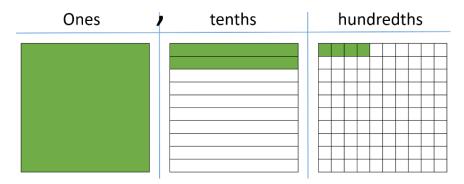
Guided work

10 minutes

- 1. Show the diagram on the board and remind the girls of **Unit 5**, **Numeracy activity 5.1** (see diagrams on page 52 of workbook).
- 2. Remind them there are ten tenths in one whole.
- 3. Point to the third square on the board and ask the girls to answer the following questions in pairs:
 - How many small squares is this whole divided into? (100)
 - How do you know? (e.g. they may see there are 10 rows of 10, or they may know that $10 \times 10 = 100$)



4. Say there are one hundred parts in the right-hand square and each is a **hundredth**. Write $\frac{1}{100}$ on your board.



- 5. Draw a place-value chart around the squares and label it, as you did in Unit 5, adding hundredths. Shade it as in the diagram.
- 6. Ask how to write the number shown as a decimal. Encourage them to discuss their ideas with the girls next to them.
- 7. Write 1, 2 and 4 under the correct columns, with a decimal point (1,24). Make sure the girls know that this is said as 'one point two four', NOT 'one point twenty-four'. Next to the place-value chart, write 'one whole, two tenths and four hundredths'.

Independent work

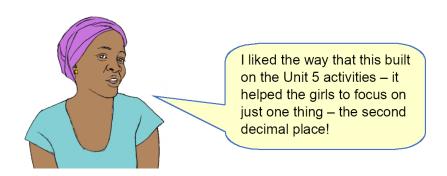
15 minutes

- 1. Put the girls in pairs of similar attainment.
- 2. Point to the sets of numbers on the board. Some girls should do Set 1, most should do Set 2, and higher-achieving girls should do Set 3.
- 3. The girls should shade the diagrams on page 68 of the workbook, writing the number of whole numbers, tenths and hundredths underneath as in the example. Some girls can also write the number as a decimal.
- 4. Ask the girls to compare their answers with another pair who did the same work. If their answers differ, they should work out together who is right and why!
- 5. If they would like to, the girls can continue this activity at home.

Assess

Check that girls are shading the boxes in the correct column. This will show you that they understand the relative values of ones, tenths and hundredths.

Reflect





Numeracy activity 7.2: Fractions, decimals and percentages

35 minutes

Plan

Write the learning objective on the board.

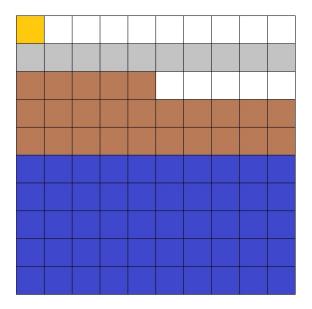
Learning objective

• To understand the connection between fractions, decimals and percentages

You will need:

For the guided activity

✓ to draw the shaded hundred square on the board or flipchart paper



For the matching game

✓ to make enough matching cards for each girl to have one card. Make sure to have complete 'sets' (each row is a set), so you may have more cards than girls.



10%	1/10	0.1
20%	2/10	0.2
25%	²⁵ / ₁₀₀	0.25
30%	3/10	0.3
40%	4/10	0.4
50%	5/10	0.5
60%	6/10	0.6
70%	7/10	0.7
80%	8/10	0.8
90%	9/10	0.9
100%	10/10	1.0



Do

Point to the learning objectives and tell the girls what they are learning in this activity.

Guided work

15 minutes

- 1. Put girls into groups of 4–6.
- 2. Remind the girls of the hundred square from Unit 2, where they found 25% and 50%, 25 out of 100 and 50 out of 100.
- 3. Ask the girls to turn to look at page 69 of their workbooks. The blue squares show 50%. Ask them to discuss on their tables how they can be sure that 50% is also $\frac{50}{100}$, $\frac{5}{10}$ and 0.5. (You might need to help them see that each line is $\frac{1}{10}$ or 0.1, so five lines will be five tenths.)
- 4. Ask them what is missing from the 50% equation (50% is also $\frac{1}{2}$)
- 5. Give the girls time to read the next two equations (10% and 1%) and discuss how they know these are correct.
- 6. The girls should now look at the brown squares and discuss together what percentage, decimal and fraction they represent. (25%, $\frac{25}{100}$, 0.25) Help them to notice that $\frac{1}{4}$ of the squares are shaded brown; 25% is equivalent to $\frac{1}{4}$.

The matching game

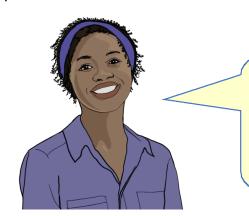
20 minutes

- 1. Give a card to each girl. Make sure there are 'sets', so three of each value. You may need to join as the third, or have the extra girl being the 'checker' with you.
- 2. Give 'easier' sets (such as 10%) to girls who may struggle to find equivalents.
- 3. The aim is to find the other two girls who will make the 'set' as quickly as possible, for example 0.1, 10%, $\frac{1}{10}$. When they are a three, they should sit down.
- 4. If you have a 'checker', she should keep watch and check the sets are correct as quickly as possible.
- 5. When all the sets are completed correctly, each three should come to the front and show everyone their equivalents.

Assess

Watch carefully while this activity is going on – it will tell you a lot about which girls are making good connections between fractions, decimals and percentages and who needs a bit more support.

Reflect



Zanele and I have been testing each other on these – we drew a hundred square in the dust and put crosses in different numbers of boxes to see if we could say what the fraction, decimal and percentages were.



Unit 7: Session 2

Learning English activity 7.2: Find the words

15 minutes

Plan

Write the learning objectives on the board.

Learning objectives

- To develop knowledge of the relationships between letters and sounds
- To develop skills in reading single words
- To develop vocabularies in English

You will need:

✓	to prepare for	our pieces of paper	for each word, wi	ith all the possible com	binations; for
	example:	t, a, f, l	a, I, f, t	Ι, τ, f, a	f, I, a, t
✓	do this for th	ne following words:			
	tafl	edmn	leph	ckik	

Answers: flat, mend, help, kick

Do

Point to the learning objectives and tell the girls what they are learning in this activity.

Guided work

15 minutes

- Post the four different examples of one word in four different corners of the room, or
 if you are outside you could pin the examples onto trees. You may need to move the
 furniture to make enough room. If you have girls with physical disabilities, they will
 need a partner to help them.
- 2. Divide the girls into four groups. Ask one group of girls to stand in the middle of the room. The other girls stand to the side. [This is important for safety so that girls do not trip or fall.]
- 3. Tell the first group to look at the four different words. They need to think about which one **looks right**.
- 4. Tell them they need to walk towards the one they think is correct. When they get to their choice, ask them to read it and think about its meaning.
- 5. If girls are in different places, let them move to another word if they think they are wrong.
- 6. Ask for volunteers to read the word and say its meaning.
- 7. Repeat the activity for the other three groups and the other three words.



Assess

Repeat the assessment from Learning English activity 1.2: Find the words.

Reflect

I tried this new idea for the activity. The girls liked moving around the room – they enjoy active learning. I like your idea very much. This is good professional development for us. We are helping each other with our own learning.





Literacy activity 7.2: Working with a short factual text

40 minutes

Plan

Write the learning objectives and key vocabulary on the board.

Learning objectives

- To develop skills in reading, understanding and creating short factual texts
- To write notes to remember things you need to do

Key vocabulary

price, earn money, borrow money

Do

Point to the learning objectives and tell the girls what they are learning in this activity.

Guided work

10 minutes

Ask the girls to look again at the unit story on page 60 in their workbooks. Then follow the instructions as given for **Literacy activity 3.2: Working with a short factual text**.

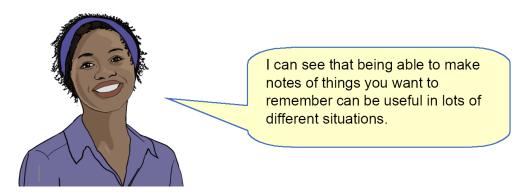
Independent work

30 minutes

1. The girls read the notes in part G (page 66), and in pairs briefly discuss possible answers to Aneni's questions. It is not necessary for these to be very accurate guesses, and some answers may be 'I really don't know'.



- 2. Each pair chooses a topic in part H (page 67). They make notes like Aneni's about the things they will need to find out in order to start doing this activity. Ideally, they will write the notes, but if that is too challenging, they can compose them orally. Visit the pairs, and help anybody who is struggling. Assist them by translating into the home language if necessary.
- 3. Put pairs who chose the same topic together. They compare their notes, and see if they agree with them. Pairs who were the only ones to choose their topic also work with another, and compare their notes. While they do this, visit the groups, check what the pairs produced and perhaps briefly join in with the discussions.



Assess

Repeat the assessment from Literacy activity 3.2: Working with a factual text.

Reflect



Learner's Self-Study Workbook

5 minutes

Ask the girls to read the Unit 8 story, and answer the questions about it if they can.



Numeracy activity 7.3: Start-up and operational costs

25 minutes

Plan

Write the learning objective and key vocabulary on the board.

Learning objective

• To understand the difference between start-up and operational costs

Key vocabulary

start-up costs, operational (or running) costs, income, expenditure

Do

Point to the learning objective and tell the girls what they are learning in this activity.

Guided work

5 minutes

- 1. Explain that Rose has been helping Chiedza and her friends with their accounts. They have been learning about setting up a business and keeping good records. Chideza is now helping Aneni.
- 2. Rose told them they need to know the difference between *start-up costs* and *operational costs* (point to these on the board).
- 3. Say that an example of a start-up cost would be a sewing machine, which would probably only be purchased once. An operational (running) cost would be fabric, as this is something they would need to buy repeatedly as they use their stock.

Independent work

20 minutes

- 1. Ask the girls to look at the list of costs that Chiedza and her friends had written down (page 69 of their workbook).
- 2. Make sure all the girls understand the meaning of all the words. If necessary, translate into their home language.
- 3. Put the girls in groups of five/six. Ask them to decide which are start-up and which are operational costs.
- 4. Bring the girls together and discuss their answers. If there are differences of opinion, ask the girls to explain why the item was on one list or the other. The group as a whole can decide!

Assess

During the whole-group discussion at the end, make a note of any girls who are looking worried – they may be struggling with the English words, or they may not understand the difference between start-up and operational costs.



Reflect



I had not thought about different types of costs in a business. I can see that it is important to think of both. It makes it a lot easier to make a business plan.

Numeracy activity 7.4: Money matters

35 minutes

Plan

Write the learning objective on the board.

Learning objective

To add and subtract amounts of money

Each group of three will need:

- ✓ place-value counters showing 0, 1, 1, 10 and 100
- ✓ place-value charts that include hundreds, tens, ones, tenths and hundredths.

Do

Point to the learning objective and tell the girls what they are learning in this activity.

Guided work

15 minutes

- 1. Say that Rose's first job was to total the girls' start-up costs.
- 2. Ask how many cents are in a dollar. (100)
- 3. Write \$1,60 on the place-value chart. Ask:
 - What does the '1' represent? (one whole dollar)
 - What does the '6' represent? (Six lots of ten cents. Ten cents is one tenth of a whole dollar.)
 - What does the '0' represent? (It shows there are no more cents. Explain that in working with money, the tenths and hundredths together show the number of cents.)
- 4. Model adding sums of money together as follows:



SAY

I am going to add the needles.

\$4,50 is four lots of one dollar and five lots of ten cents. It goes on my chart as five tenths.

\$13,50 is one lot of ten dollars, three lots of one dollar and five lots of ten cents. It goes on my chart as five tenths.

WRITE

DO				
lundreds	Tens	Ones	tenths	hundredths
			87 87 87 87	
	10	• • •	81 81 81 81 81	

	Hundreds	Tens	Ones	tenths	hundredths
			4	5	0
+		1	3	5	0

SAY

First add the tenths as there are no hundredths. I have ten tenths, so I exchange them for one whole. I place that below the line in the 'ones' column. I have no tenths left so I put a 0 in the tenths column.

DO					WF	RITE
Hundreds	Tens	Ones	tenths	hundredths		Hundr
		1111				
	10	1 1 1			+	
			at at at			
		1				

WRITE							
	Hundreds	Tens	Ones	tenths	hundredths		
			4	5	0		
+		1	3	5	0		
				0	0		
			1				

SAY

Now add the ones. I have eight ones, the four, the three and the one below the line. I write that in the ones column. Finally add the tens, that's just one. The cost of the needles is \$18.00

DO								
Hundreds	Tens	Ones	tenths	hundredths				
	10							

WRITE								
	Hundreds	Tens	Ones	tenths	hundredths			
			4	5	0			
+		1	3	5	0			
		1	8	0	0			
			1					



Independent work

20 minutes

- 1. In groups of three, the girls pick three start-up costs from the list in their workbooks (at least two should be decimal numbers) to total, using the place-value charts and counters. One girl uses the counters, one writes the calculation and the third checks. They should not include the sewing machine.
- 2. If they complete one addition, they should choose another three costs and add those.
- 3. If some girls finish two sets of addition quickly, ask them to begin working through the SAGE super challenge tasks on the bookmark.
- 4. If they would like to, girls can complete the Money Matters activity on page 69 of the workbook at home.

Assess

Move around as the girls work, checking their progress and giving feedback. Look out for misconceptions, such as not noticing some are whole numbers, or that some have hundreds, others tens, some only ones. Stop the whole group and explain again if you see that most of the girls are struggling.

Reflect





Unit 8: Bethsaida the toy maker

In this unit, girls learn that to achieve a new skill you must practise. Some SAGE girls will need to practise their numeracy or English skills; some may have to work harder than others. However, with patience and resilience it is possible to improve, just like Bethsaida's grandfather tells her.

Learning objectives

Literacy/Learning English

- To listen to and understand a story in the home language
- To respond to questions about the text
- To develop skills in reading, understanding and writing short sentences
- To develop knowledge of the relationships between letters and sounds
- To develop skills in reading single words
- To develop vocabularies in English
- To develop skills in reading, understanding and creating short factual texts
- To make notes to remember the things you need to do for making or doing something

Numeracy

- To calculate 10% of a number
- To understand about interest payments on a loan
- To divide three- and four-digit numbers by a one- or two-digit number
- To know how to find monthly payments for a twelve-month loan
- To understand the size and order of decimal numbers
- To understand negative numbers in a real context
- To begin to understand about profit and loss



Subject and activity number	Activity	Time (mins)
	Session 1	
Literacy 8.1	The unit story	30
Learning English 8.1	Writing short sentences	25
Numeracy 8.1	How much interest?	20
Numeracy 8.2	Affording repayments	40
	Session 2	
Learning English 8.2	Match the syllables	10
Literacy 8.2	Working with a short factual text	40
	Learner's Self-Study Workbook	5
Numeracy 8.3	Three in a row	15
Numeracy 8.4	Profit and loss	45



Unit 8: Session 1

Literacy activity 8.1: The unit story

30 minutes

Plan

Write the learning objectives and key vocabulary on the board.

Learning objectives

For all girls:

- To listen to and understand a story in the home language
- To respond to questions about the text

Some girls will be able:

To read and understand a story in English and write answers to questions about it

Key vocabulary

metal, tin can, expert, skill, awful, terrible

Do

Point to the learning objectives and tell the girls what they are learning in this activity.

Follow the instructions given in Units 1 and 2.

Assess

Before the session, choose three pairs of girls. During *Independent work*, sit with one pair of girls. Ask one girl to read a sentence, then the next girl. Record their achievement in your **Progress Book**. Then listen to the next pair and then the next pair, so that you have listened to six girls. This is a quick activity – make it fun for the girls.

Answers for Unit 8: C 1 They collect scrap/unwanted metal, 2 They are colourful, and they are all different, 3 Make the toy cars, 4 Her first car wasn't very good, 5 'All skills take time to learn,' 6 It was a bit better. **D** 1 melts, 2 colourful, 3 expert, 4 skills, 5 patient, 6 terrible

Reflect





Learning English activity 8.1: Writing short sentences

25 minutes

Plan

Write the learning objective on the board.

Learning objective

• To develop skills in reading, understanding and writing short sentences

Do

Point to the learning objective and tell the girls what they are learning in this activity.

Guided work

10 minutes

Follow the instructions given for **Learning English activity 2.1: Writing short sentences**, but use sentences starting *I want to learn how to* ______. For example: *I want to learn how to use a computer. I want to learn how to drive a car.* (As the girls' learning ambitions are likely to be different, this time there are no sentences with *We...*.)

Independent work

15 minutes

Ask the girls to turn to page 75, part E in the workbook and complete the writing task.

Guided work

- 1. Ask the girls to choose their favourite sentence. This is the one they will read aloud to the group. Let them read it to themselves, then to their friend. Support any girls you know need extra help.
- 2. Ask the girls to stand up. The first girl reads her sentence and sits down, then the next girl, then the next girl. This should be a quick and fun activity for the girls. If a girl is struggling, stand next to her and offer your support.

Assess

Repeat the assessment from Learning English activity 2.1: Writing short sentences.

Reflect



This is a simple activity, but all girls can be successful. For higher-attaining girls, I set them different writing challenges. Some girls like writing at home, which they bring to the hub for me to read.



Numeracy activity 8.1: How much interest?

20 minutes

Plan

Write the learning objectives and key vocabulary on the board.

Learning objectives

- To calculate 10% of a number
- To understand about interest payments on a loan

Key vocabulary

loan, interest, percentage

You will need:

✓ a large place-value chart (thousands, hundreds, tens, ones and tenths) and 5, 9, 9, 7
digit cards.

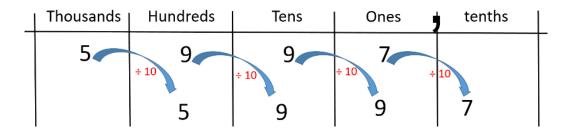
Do

Point to the learning objectives and tell the girls what they are learning in this activity.

Guided work

10 minutes

- 1. Say that Aneni and Chiedza are working on the business plan for the internet café. Aneni needs to borrow money to buy computers. Chiedza explains about the loan she took out and the repayments.
- 2. Chiedza bought three hand-sewing machines when they started. Each machine cost \$1999. (Total \$5997). They took out a loan with an interest rate of 10%. This means that Chiedza will have to pay 10% more back than she borrowed.
- 3. Remind the girls that 10% is the same as 0.1 or $\frac{1}{10}$, that is, one part out of ten. To find 10%, the whole needs to be divided by 10.
- 4. Place the 5 997 digits in the correct positions on the place-value chart. Say: 'To find 10% of 5997, I need to divide by 10 by moving each digit to the right.' Move each digit and ask the girls to tell their partner what number you have made. (599,7)





5. Write 5997 ÷ 10 = 599,7, so 10% of \$5997 = \$599.70
Say you can find the total that Cheidza has to pay back by adding the loan and the interest together. (\$6596,70)

Independent work

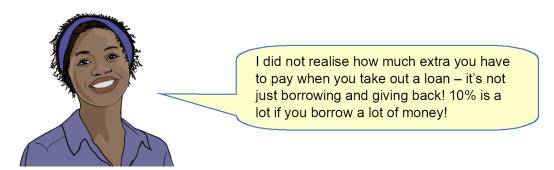
10 minutes

- 1. Ask the girls to turn to page 77 in their workbooks and read question 1 together.
- 2. In small groups, the girls should use the place-value charts and digit cards to find out how much interest Aneni will have to pay.
- 3. Gather the whole group together and ask one small group to demonstrate how they found the answers. (Interest: 10% of 8960 = 896, Altogether: 8960 + 896 = 9856)

Assess

This activity will help you see how well the girls have understood about dividing by 10 and the relationship between decimals, fractions and percentages.

Reflect



Numeracy activity 8.2: Affording repayments

40 minutes

Plan

Write the learning objectives and key vocabulary on the board.

Learning objectives

- To divide three- and four-digit numbers by a one- or two-digit number
- To know how to find monthly payments for a twelve-month loan

Key vocabulary

instalment, repayment



You will need:

- ✓ a large division chart as shown in instructions below
- ✓ a large quantity of place-value counters (1000, 100, 10, 1); you may want to count the 100s and 10s into groups of ten before you do the guided part of the activity
- ✓ smaller division charts (one for each group).

If you do not have enough place-value counters, squares of paper with the value written on will work.

Do

Point to the learning objectives and tell the girls what they are learning in this activity.

Guided work

20 minutes

- 1. Chiedza had to make sure the loan repayments were affordable. They were asked to pay the loan back over one year.
- 2. They only wanted to know *roughly* how much they had to pay per month, so they rounded the amount up to \$6600.
- 3. To work out the payment, we need to do a division by 12.
- 4. Demonstrate this method for division of three- and four-digit numbers.

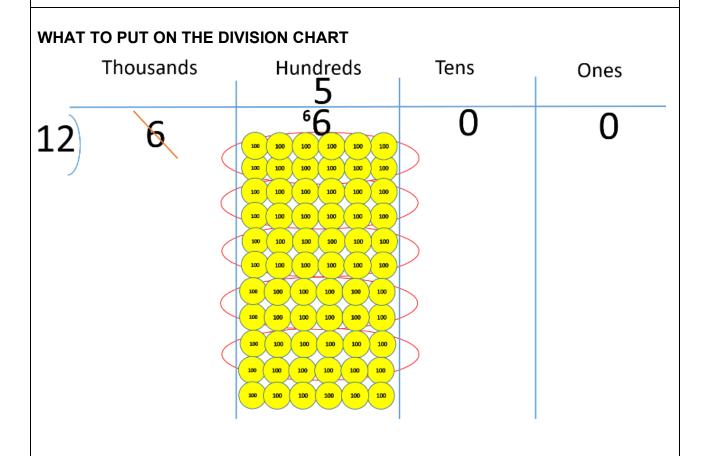
WHAT TO SAY/DO

- 6600 is 6 thousands, 6 hundreds, no tens and no ones [place on chart].
- I will start with the thousands. How many groups of 12 'thousand' counters can I
 make from 6 'thousand' counters? None! I shall exchange them for 60 'hundred'
 counters.



WHAT TO SAY/DO

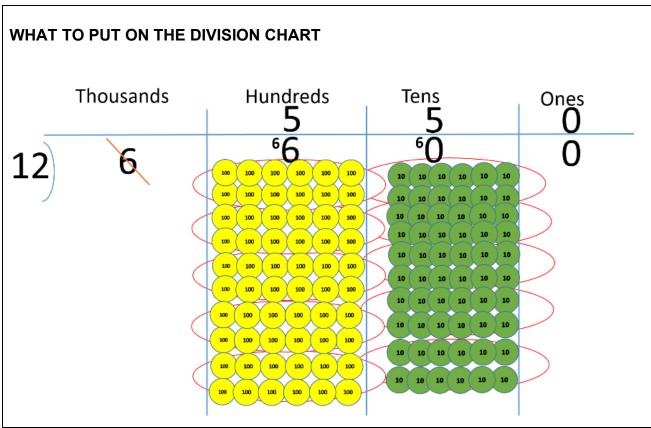
- Now I have 66 'hundred' counters. I will cross out the 6 in the thousands column and put a small 6 in the hundreds column.
- How many groups of 12 'hundred' counters can I make from 66 'hundred' counters? 5, because 5 x 12 = 60.
- I will put 5 on the answer line
- There are 6 'hundred' counters left over. I will exchange these 6 for 60 'ten' counters.



WHAT TO SAY/DO

- Now I have 60 'ten' counters. I will put a small 6 in the tens column.
- How many groups of 12 'ten' counters can I make from 60 'ten' counters?
- 5, because 5 x 12 =60. I will put a 5 in the answer line.
- I have no counters left! I will put 0 on the answer line in the ones column as a place holder. I can see that 6600 ÷ 12 = 550!





Independent work

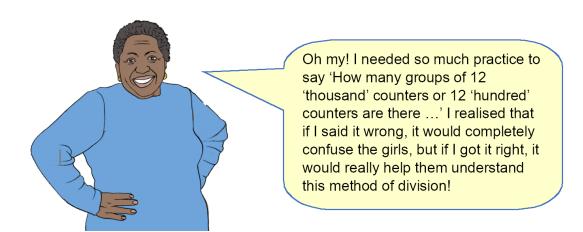
20 minutes

- 1. Put the girls into mixed attainment groups.
- 2. Ask the girls to turn to page 77 in their workbooks. Read question 2 together.
- 3. Aneni only needs to know roughly how much she will pay back, so they can round the cost up. Ask what the rounded figure should be. (\$9900)
- 4. Talk through using the division grid to divide 9900 by 12. The girls should copy you in each step (give time for this), repeating the same words. Within their group, they should take turns with each step.

Assess

This will be a new strategy for the girls, but some may have come across the 'bus stop method' before. Be careful that these girls do not take over during the group work.

Reflect





Unit 8: Session 2

Learning English activity 8.2: Match the syllables

10 minutes

Plan

Write the learning objectives on the board.

Learning objectives

- To develop knowledge of the relationships between letters and sounds
- To develop skills in reading single words
- To develop vocabularies in English

Do

Point to the learning objectives and tell the girls what they are learning in this activity.

Independent work

10 minutes

Repeat Learning English activity 6.2: Match the syllables, but with the syllables below:

plas	come
quick	ing
thou	ore
bef	est
wel	sand
rain	tic

Answers: plastic, quickest, thousand, before, welcome, raining

Assess

Note in your **Progress Book** which pairs of girls found this easy and which girls struggled. Next time, you will need to support the girls who were struggling. Talk to the learning assistant about which girls she noticed found this a difficult task.







Literacy activity 8.2: Working with a short factual text

40 minutes

Plan

Write the learning objectives and key vocabulary on the board.

Learning objectives

- To develop skills in reading, understanding and creating short factual texts
- To make notes to remember the things you need to do for making or doing something

Key vocabulary

flat, bend, wheel, shape, piece

Do

Point to the learning objectives and tell the girls what they are learning in this activity.

Guided work

10 minutes

Ask the girls to look again at the unit story on page 70 in their workbooks. Then follow the instructions as given for **Literacy activity 3.2: Working with a short factual text**.

Independent work

30 minutes

- 1. The girls read the notes in part F (page 75) in pairs, and discuss the correct order. Visit any pairs who are struggling. When they have finished, they compare their answers with another pair. The order is:
 - 1. Choose some nice tin cans
 - 2. Make the cans flat
 - 3. Cut the shapes
 - 4. Bend the pieces
 - 5. Put the pieces together
 - 6. Put on the wheels
- 2. Each pair chooses an activity for part G, and they discuss their ideas for the various stages involved in doing that activity. They make instructions like Bethsaida's (on the previous page) about the stages for this activity. Ideally, they will write the notes, but if that is too challenging, they can compose the instructions orally. Visit the pairs, and help anybody who is struggling. Assist them by translating into the home language if necessary.
- 3. Put pairs who chose the same topic together. They compare their instructions, and see if they agree with them. Pairs who were the only ones to choose their topic also work with another pair, and compare their instructions.

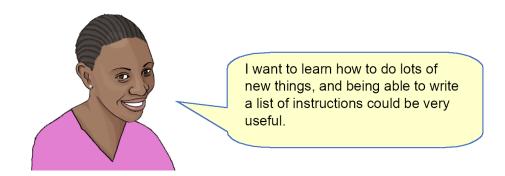


4. Ask for volunteers to read their instructions. The rest of the group have to guess what the girl is describing.

Assess

Repeat the assessment from Literacy activity 3.2: Working with a factual text.

Reflect



Learner's Self-Study Workbook

5 minutes

Ask the girls to read the Unit 9 story, and answer the questions about it if they can.

Numeracy activity 8.3: Three in a row

15 minutes

Plan

Write the learning objective on the board.

Learning objective

• To understand the size and order of decimal numbers

Each pair of girls will need:

- √ two dice
- ✓ something to write on and something to write with.

Do

Point to the learning objective and tell the girls what they are learning in this activity.

Guided work

5 minutes

Many of the girls will have played this game with whole numbers in Module 1.

1. Ask for a volunteer. Draw a line on the board. Write '1'to '7' at equal intervals along the line.



- 2. Roll both dice and use the numbers to make a decimal. For example, 2 and 6 to make 2,6 or 6,2.
- 3. Write your number where you think it should go on the number line, putting your initials beside it. Explain your thinking. For example: 'I know that my number [6,2] is a little bit bigger than 6, but it is not half way between 6 and 7, that would be 6,5, so I'm going to put it quite close to 6.'
- 4. Ask the volunteer to do the same.

Independent work

10 minutes

- 1. Put the girls into pairs to play the game. The aim is to get three numbers on the line in a row without any of their opponent's numbers between them.
- 2. They should think carefully about which number to make when they roll the dice. Which will give them a greater chance of winning? Which might stop their opponent winning?
- 3. They can play the game several times.

Assess

Watch carefully to make sure the girls are placing their numbers in the correct position on their number lines. If a lot of girls are struggling, change the game and play in two teams with a giant number line drawn on the ground.

Reflect



Numeracy activity 8.4: Profit and loss

45 minutes

Plan

Write the learning objectives and key vocabulary on the board.

Learning objectives

- To understand negative numbers in a real context
- To begin to understand about profit and loss



Key vocabulary

profit, loss, positive, negative, balance

You will need:

- ✓ to draw a giant number line on the ground with 0 in the centre, positive and negative numbers to at least 10 each side
- ✓ to find the 'hub coins' that you made in Module 1
- ✓ to copy this table onto the board:

Item	Income (h\$)	Expenditure (h\$)
Loan repayment		\$15
Rent		\$10
Materials (Fabric, thread etc)		\$20
Wages		\$15
Dresses	\$25	
Shirts	\$15	
Skirts	\$20	

Do

Point to the learning objectives and tell the girls what they are learning in this activity.

Introduction

10 minutes

- 1. Gather the girls around the number line and ask for a volunteer to stand on 0.
- 2. Ask her to move along the number line in the correct direction as you read the following:
 - 'I start off with \$10. (Move to 10) I spend \$5. (Move down 5) I am given \$2. (Move up 2) I spend \$6. (Move down 6). I have to get a new tyre for my bike, it costs \$5. (Move down 5).'
- 3. Ask if I had enough money. (no) Say that I had to borrow from my friend. Explain that negative numbers are numbers less than zero, often used to show when accounts are making a loss I now owe my friend \$4, I am in debt! And if she charges interest on the loan, I shall be even more in debt!

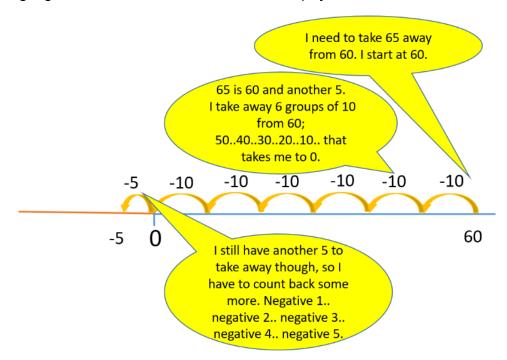


4. The numbers less than zero are called 'negative numbers' and are written using a – symbol in front of the number.

Guided work

15 minutes

- 1. Remind the girls about start-up and operational costs (Unit 7).
- 2. Start-up costs are often funded through a loan, which has to be paid back. So, it is difficult to make a profit initially, and often you make a loss.
- 3. In this session, you are working with 'hub dollars'. Each hub dollar (h\$) is worth a lot, so the numbers are much smaller than the numbers in Chiedza's accounts. Show the 'hub dollars' from Module 1.
- 4. Explain that subtracting the expenditure from the income shows the profit/loss made
- 5. Use the table that you have drawn on the board to demonstrate
 - finding the total of each column
 - using a blank number line to subtract expenditure from income (h\$60 h\$65).
- 6. Ask if the business made a profit or a loss in June, and how much. (*loss of h\$5*) Highlight that if there had been no loan to pay back, it would have made a profit!)



Independent work

20 minutes

- 1. Put the girls into mixed-attainment pairs.
- 2. Turn to page 78 of the workbook. Their task is to find out whether the business made a profit or a loss in July and August.
- 3. First, they should total each column (use any strategy).
- 4. Next, they should use a number line to calculate profit or loss for each month.



5. After 15 minutes, discuss the answers as a group. Draw attention to the fact that if the loan had been paid off, June and August would both have made a profit!

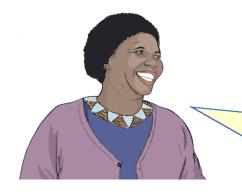
6. If there is time, give the girls the following to work on in pairs on their chalkboards and go through the answers as a whole group.

a) Income: h\$83 Expenditure: h\$96b) Income: h\$62 Expenditure: h\$74

Assess

Watch the girls as they work to see how well they are grasping the concept of negative numbers – some will need more practice.

Reflect



The number line is a really good way to introduce negative numbers. Some of the girls understood very quickly, so I put them in a group together and gave them some other income and expenditure questions that involved hundreds and thousands!



Unit 9: Let's use solar power

Remind the girls to invite someone they respect and admire to come to the final session in Unit 10. They may want to invite a family member, or respected community member. The important message is that it should be someone they want to show their new skills to.

Learning objectives

Literacy/Learning English

- To listen to and understand a story in the home language
- To respond to questions about the text
- To develop knowledge of the relationships between letters and sounds
- To develop skills in reading and writing single words
- To develop vocabularies in English
- To develop knowledge of the relationships between letters and sounds
- To develop skills in reading single words
- To develop vocabularies in English
- To develop skills in reading, understanding and creating short factual texts
- To explain how a process works

Numeracy

- To choose and use appropriate methods of calculation
- To link words with mathematical operations
- To use known facts to make estimations
- To use diagrams to support problem solving

Subject and activity number	Activity	Time (mins)
	Session 1	
Literacy 9.1	The unit story	30
Learning English 9.1	Read and write words	25
Numeracy 9.1	Calculation methods	35
Numeracy 9.2	Words and operations	25
	Session 2	
Learning English 9.2	Find the words	10
Literacy 9.2	Working with a short factual text	40
	Learner's Self-Study Workbook	5
Numeracy 9.3	More or less	20
Numeracy 9.4	Using diagrams to solve problems	40



Unit 9: Session 1

Literacy activity 9.1: The unit story

30 minutes

Plan

Write the learning objectives and key vocabulary on the board.

Learning objectives

For all girls:

- To listen to and understand a story in the home language
- To respond to questions about the text

Some girls will be able:

To read and understand a story in English and write answers to questions about it

Key vocabulary

solar power, electricity, charge a battery, search on the internet

Do

Point to the learning objectives and tell the girls what they are learning in this activity.

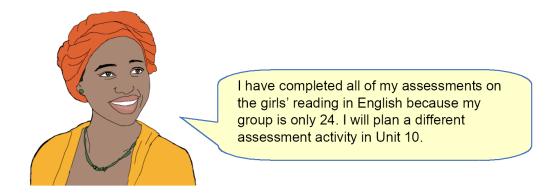
Follow the instructions given in Units 1 and 2.

Assess

Before the session, choose three pairs of girls. During *Independent work*, sit with one pair of girls. Ask one girl to read a sentence, then the next girl. Record their achievement in your **Progress Book**. Then listen to the next pair and then the next pair, so that you have listened to six girls. This is a quick activity – make it fun for the girls.

Answers for Unit 9: C 1 True, 2 False, 3 True, 4 True, 5 False, 6 True; D 1 battery, 2 charge, 3 system, 4 connected

Reflect





Learning English activity 9.1: Read and write words

25 minutes

Plan

Write the learning objectives on the board.

Learning objectives

- To develop knowledge of the relationships between letters and sounds
- To develop skills in reading and writing single words
- To develop vocabularies in English

You will need:

✓ to write these sounds on the board:

```
tch • dge kn • ew ea • ey oe • ue g • c
```

Do

Point to the learning objectives and tell the girls what they are learning in this activity.

Refer back to the instructions given for **Read and write words** Part 1 and Part 2 They are written in full for Units 1 and 3.

For Part 1, the girls open their workbooks to part E, page 84.

For Part 2, the girls open their workbooks to part F, page 84.

You will need these words for part F.

```
tch (as in watch, match, stitch, butcher) • dge (as in bridge, badge, edge, lodge)
kn (as in knife, know, knot, knock) • ew (as in new, flew, threw, knew)
ea (as in bread, dead, instead, thread) • ey (as in money, monkey, donkey, honey)
oe (as in toes, tomatoes, potatoes, goes) • ue (as in true, argue, statue, value)
g (as in page, age, magic, huge) • c (as in rice, face, space, cinema)
```

Assess

Before the session, choose six girls to focus on. Record which English words these girls already know, and which were new to them. Record this in your **Progress Book**.

Reflect

My pronunciation of the phonics sounds is much improved. I use the SAGE audio files to practise before each session.





Numeracy activity 9.1: Calculation methods

35 minutes

Plan

Write the learning objective on the board.

Learning objective

To choose and use appropriate methods of calculation

You will need:

- √ numeracy resources (place-value counters, bead strings etc.)
- ✓ chalkboard and chalk (one per pair).

Do

Part 1: My way or your way?

Guided work

15 minutes

Point to the learning objective and tell the girls what they are learning in this activity.

- 1. Organise the girls into pairs. Label one girl A and one girl B.
- 2. Ask girl A to solve 35 + 37 and girl B to solve 42 + 45. Tell the girls that they can use number lines, beadstrings or place-value counters to help them.
- 3. Each girl should explain to the other how they solved the problem.
- 4. Each pair should discuss the methods chosen. Would the same method work for both problems?
- 5. Repeat with other calculations. Some examples are presented in the table below.

Α	В	Possible strategies
115 + 11	212 + 9	The girls might add ten and then adjust
137 – 42	112 – 27	The girls might use partitioning and subtract to 100 first
15 x 3	18 x 4	The girls might use doubling for B
120 ÷ 20	120 ÷ 30	The girls might multiply by 10



Part 2: Robot calculations

Some example calculations for this activity are in the table. Write these on the board. You can add to these or adapt them to suit the girls, but be careful not to give higher numbers unless you are absolutely sure the girls can do the task with the numbers in the example.

34,5 x 10
25,8 x 100
340 ÷10
25% of 48
50% of 120
10% of 450

Independent work

10 minutes

- 1. Organise the girls into pairs with a chalkboard and chalk.
- 2. The girl without the chalk should tell the other girl how to complete each calculation. The girl with the chalk is a 'robot' she can only write down what she is told.
- 3. Once the 'robot' has written down the answer, the pair of girls should agree if the answer is correct.
- 4. Swap roles after three turns.

Assess

5 minutes

At the end of the session, ask the girls to put these three statements in order on their chalkboards from easiest to most difficult. For example, one of the girls might write 3, 1, 2 or another girl might write 2, 1, 3. Note if there are common areas of difficulty, it may be an area to revisit later.

- 1) Adding and subtracting decimal numbers
- 2) Finding fractions of amounts
- 3) Finding percentages of amounts

Reflect

The girls are developing confidence in using different methods of calculation but if any words are added then they find it more difficult.





Numeracy activity 9.2: Words and operations

25 minutes

Plan

Write the learning objective and key vocabulary on the board.

Learning objective

• To link words with mathematical operations

Key vocabulary

add, total, sum, difference, more than, less than, subtract, double, multiply, percent

You will need:

✓ numeracy resources (place-value counters, bead strings etc.).

Do

Guided work

10 minutes

Point to the learning objective and tell the girls what they are learning in this activity.

- 1. Ask them to turn to page 87 of the workbook and look at the clues for the puzzle.
- 2. Write the symbols + and on your chalkboard.
- 3. Ask the girls to choose a word from the puzzle clues, give them the chalk and ask them to write the word under the correct subheading.
- 4. Repeat until the meaning of each of the +/- words is clear.

Independent work

15 minutes

- 1. Ask the girls to turn to page 87 of the workbook.
- 2. Check they understand how to complete the puzzle (a crossword with numbers).
- 3. If there is any time left in the session, let the girls start the puzzle. They can complete the puzzle at home.

Assess

Look for misconceptions when making the list of words.

Reflect



There are so many different ways of saying the same thing! It was really useful to make a list – sum, total and more are just ways of saying add!



Unit 9: Session 2

Learning English activity 9.2: Find the words

10 minutes

Plan

Write the learning objectives on the board.

Learning objectives

- To develop knowledge of the relationships between letters and sounds
- To develop skills in reading single words
- To develop vocabularies in English

Do

Point to the learning objectives and tell the girls what they are learning in this activity.

Independent work

10 minutes

For this final 'Find the words' activity, ask the girls which was their favourite way of doing the activity (see 1.2, 3.2, 5.2 or 7.2 activity instructions). The letters/words to find are:

eskd

lagf

utms

ssred

Answers: desk, flag, must, dress

Assess

Repeat the assessment from Learning English activity 1.2: Find the words.

Reflect





Literacy activity 9.2: Working with a short factual text

40 minutes

Plan

Write the learning objectives on the board.

Learning objectives

- To develop skills in reading, understanding and creating short factual texts
- To explain how a process works

Do

Point to the learning objectives and tell the girls what they are learning in this activity.

Guided work

10 minutes

Ask the girls to look again at the unit story on page 79 in their workbooks. Then follow the instructions as given for **Literacy activity 3.2: Working with a short factual text**.

Independent work

30 minutes

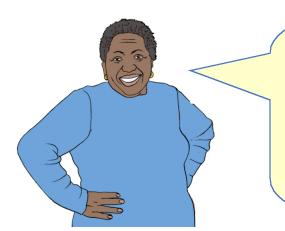
- 1. In pairs, the girls discuss the meanings of the words at the start of part G (page 85). Then they fill in the missing text. Visit the pairs while they work, and help anybody who is struggling. When they have finished, they should compare their work with another pair.
 - Answers: gap-fill words in order panel / sunlight / wire / battery / power / lights / charge
- 2. The pairs choose a topic in part H (page 86), and discuss how that thing works. Girls can write or draw how their chosen thing works.
- 3. Visit the pairs, and help anybody who is struggling. Assist them by translating into the home language if necessary.
- 4. When the pairs have finished, they present their explanation to another pair (who chose a different thing). If time allows, they can repeat this with another pair.
- 5. Writing an explanation of how something works even at a very basic level can be quite challenging. In this case, you may wish to encourage girls with high levels of writing skill to complete written versions of their explanations at home.
- 6. Ask girls who drew a diagram to explain their instructions to a small group. Girls who wrote their instructions can try to put their words into pictures.

Assess

Repeat the assessment from Literacy activity 3.2: Working with a factual text.



Reflect



I encouraged my girls to write their explanations at home. It's a challenging writing task, and I didn't expect many of them to do it. In fact, about half of them did. I could see that some of them had put a lot of work into it, and had achieved a level of writing skill I hadn't seen from them before.

Learner's Self-Study Workbook

5 minutes

Ask the girls to read the Unit 10 story, and answer the questions about it if they can.

Numeracy activity 9.3: More or less

20 minutes

Plan

Write the learning objective on the board.

Learning objective

 To use known facts to make estimations

Each girl will need:

✓ a chalkboard and chalk.

Do

Guided work

20 minutes

Point to the learning objective and explain to the girls what they are learning in this activity.

Questions to ask (you can adapt or add to as needed)

- Is the total of 25 + 27 more or less than 50?
- Is the sum of 49 and 52 more or less than 100?
- Is the total of 5,1 and 5,2 more or less than 10?
- Is the difference between 120 and 25 more or less than 100?
- Is half of 86 more or less than 40?
- Is one quarter of 92 more or less than 25?
- Is 10 percent of 245 more or less than 24?
- Is 50 percent of 230 more or less than 100?



- 1. Write **more** and **less** on the chalkboard and check the girls can read and spell the words.
- 2. Ask the girls a question (see suggestions). They write *more* or *less* on their chalkboard.
- 3. On the count of '3, 2, 1' the girls show their chalkboards.
- 4. Ask two or three girls: 'How did you know? What number fact did you use to help you decide?'

Numeracy activity 9.4: Using diagrams to solve problems

40 minutes

Plan

Write the learning objective on the board.

Learning objective

To use diagrams to support problem solving

Each girl will need:

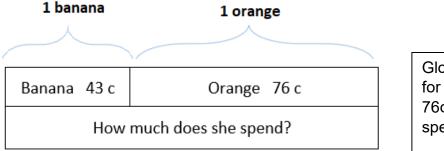
- ✓ a chalkboard and chalk
- ✓ numeracy resources available.

Guided work

20 minutes

Point to the learning objective and tell the girls what they are learning in this activity.

- 1. Explain to the girls that in this activity they are finding out what steps are needed to solve a problem (in the next part they will work out the answers).
- 2. Ask a girl to read the first problem in the workbook (page 88) aloud.
- Read the problem again and write each part of the problem in a diagram like the one below

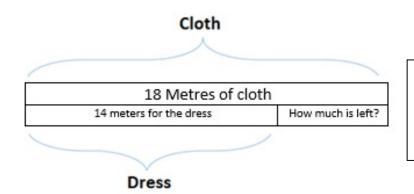


Glory's aunt buys a banana for 43c and an orange for 76c. How much does she spend?

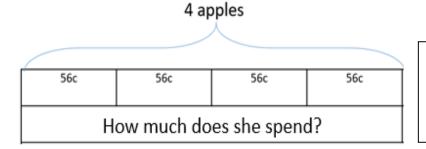
4. Ask the girls to write the calculation (just the calculation, no answer) needed to solve the problem on their chalkboard. On a count of '3, 2, 1', everyone holds their chalkboard up to show the calculation. (43 + 76)



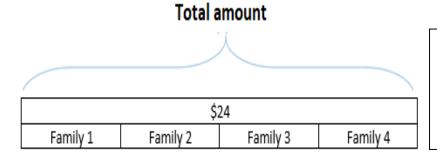
5. Repeat this for the next three problems in the workbook, drawing each of the diagrams as shown below (2: 18 - 14; 3: 56 + 56 + 56 + 56 or 56×4 ; $4: 24 \div 4$).



Chipiwo buys 18 metres of cloth. She uses 14 metres to make a dress. How much material does she have left?



Dee buys four apples for her journey. Each apple costs 56c. How much does Dee spend?



Chiedza wants to send money to her family. She shares \$24 equally between four family members. How much do they get each?

Independent work

20 minutes

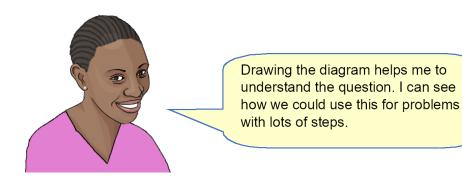
- 1. Ask the girls to answer the four problems in the workbook. Encourage them to draw a diagram, write the calculation and then work out the answer, using numeracy resources if they find them helpful.
- 2. They can finish them at home if they do not finish in the session.

Assess

During the *Guided work*, scan the chalkboards and note which girls are able to identify the calculation needed and which girls might need more support in the *Independent work*.



Reflect



A reminder

In Unit 10, the girls will engage in a public-speaking activity, sharing their hopes and aspirations for their futures. To make this activity special, ask the girls to invite someone they respect and admire along to the last session. In the final session, the girls can demonstrate their learning by working alongside their guest. The invited guests will also form part of the audience for the public-speaking assessed activity. Remind the girls to invite their special guests for the final session.



Unit 10: Let's share our learning

You should have many visitors for the last SAGE session. During work time, ask the visitors to sit with the girls. The girls should explain their work, demonstrating what they have learned in literacy, numeracy and English. Invite the visitors to stay to hear the girls during the public-speaking assessment.

You will also carry out the **Progress Assessments** in this unit.

Learning objectives

Literacy/Learning English

- To listen to and understand a story in the home language
- To respond to questions about the text
- To develop knowledge of the relationships between letters and sounds
- To develop skills in reading single words
- To develop vocabularies in English
- To develop skills in reading, understanding and creating short factual texts
- To write about my future pathway
- To be confident in public speaking

Numeracy

- To use diagrams to support problem solving
- To use 'guess and check' and 'try and improve' as a strategy for solving problems
- To solve problems with lots of possible solutions
- To work systematically

Subject and activity number	Activity	Time (mins)
	Session 1	
Literacy 10.1	The unit story	30
Learning English 10.1	Match the syllables	10
Literacy and Learning English 10.2	Working with a short factual text and giving a speech + Progress Assessment	60
	Session 2	
Numeracy 10.1	Using diagrams to solve multi-step problems using diagrams	35
Numeracy 10.2	Using 'try and improve' as a strategy for solving problems	25
Numeracy 10.3	Solving problems with lots of possible answers + Progress Assessment	60



Unit 10: Session 1

Literacy activity 10.1: The unit story

30 minutes

Plan

Write the learning objectives and key vocabulary on the board.

Learning objectives

For all girls:

- To listen to and understand a story in the home language
- To respond to questions about the text

Some girls will be able:

To read and understand a story in English and write answers to questions about it

Key vocabulary

nut, kernel, marula oil, press

Do

Point to the learning objectives and tell the girls what they are learning in this activity.

Follow the instructions given in Units 1 and 2 and complete Parts A, B, C and D.

THEN for this unit only

The girls read the web page advertisement on page 94 in part E in pairs, and discuss the answers to the questions. Visit any pairs who are struggling. When they have finished, they compare their answers with another pair.

Answers for part E: 1 cooking and to put on your face and hair, 2 small producers in Zimbabwe, 3 on the internet – 'Buy now' and the background picture of a tablet.

Assess

Before the session, choose three pairs of girls. During *Independent work*, sit with one pair of girls. Ask one girl to read a sentence, then the next girl. Record their achievement in your **Progress Book**. Then listen to the next pair and then the next pair, so that you have listened to six girls. This is a quick activity – make it fun for the girls. You should now have information on all girls' reading comprehension and reading aloud in English.

Answers for Unit 9: C 1 They open them and collect the kernels. 2 They are made into oil. 3 Make the kernels into oil and sell that instead. 4 There is an organisation with an oil press they could use. 5 If it would be worth travelling to use the oil press. 6 To talk about the help Vimbai and her friends gave. **D** 1 kernel, 2 press, 3 clap



Reflect



I asked the girls how I should assess their reading for this activity. They decided that all girls should read aloud. They chose one sentence each, practised in pairs and then read the story as a group. We were all so happy. They have very good reading and support each other if a word is difficult. I am very happy.

Learning English activity 10.1: Match the syllables

10 minutes

Plan

Write the learning objectives on the board.

Learning objectives

- To develop knowledge of the relationships between letters and sounds
- To develop skills in reading single words
- To develop vocabularies in English

Do

Point to the learning objectives and tell the girls what they are learning in this activity.

Independent work

10 minutes

Repeat Learning English activity 6.2: Match the syllables, but with the words below.

un	bye
quick	der
good	ful
class	ly
har	room
care	vest

Answers: under, quickly, goodbye, classroom, harvest, careful



Assess

Note down in your **Progress Book** which pairs of girls found this easy and which girls struggled. When you are planning for Module 2b, you will need to support the girls who were struggling. Talk to the learning assistant about which girls she noticed found this a difficult task.

Reflect



The girls made very quick progress with this activity. My Progress Book shows that all girls can complete this activity. For higher-attaining girls, I challenge them to use these words in their writing.

Literacy and Learning English activities 10.2: Working with a short factual text and giving a speech + Progress Assessment

60 minutes

Plan

Write the learning objectives on the board.

Learning objectives

- To develop skills in reading, understanding and creating short factual texts
- To write about my future pathway
- To be confident in public speaking

Do

Point to the learning objectives and tell the girls what they are learning in this activity.

Welcome the invited community members to the session. Explain that the girls were asked to invite a person they admire to the session to share with them their SAGE learning.

Guided work

10 minutes



- 1. Turn to page 95, part F in the workbook. Follow the instructions given for **Learning English activity 2.1: Writing short sentences**, but use sentences starting *I would like to* _____. This can refer to the girls' future work ambitions. For example: *I would like to be a driver. I would like to start my own business.*
- 2. The invited community members can sit with the girls. They can help the girls or the girls can demonstrate their learning.

Independent work

15 minutes

- 1. Turn to page 95, part G in the workbook. Ask the girls to write notes about their reasons for wanting to do their chosen things in the future.
- 2. Tell the girls that they will be sharing their ideas with the group and invited community members.
- 3. Each girl has one minute to give her talk to the group and invited community members. If the girl finishes very quickly, ask her questions to help her expand her ideas. The girl may wish to speak in English or her home language.
- 4. If there is time at the end of the session, ask the invited community members to ask questions or to share advice.
- 5. At the end of the presentations, congratulate each and every girl. Say that you hope you see her at the start of Module 2b in September.

Progress Assessment

35 minutes

As each girl reads her notes or sentences and then shares her reasons for wanting that future, record her achievement on the **Progress Assessment** sheet (Appendix B).

Record how well she:

- reads her notes or sentences in English or the home language
- shares her reasons for wanting this future. Record if she does this in English or the home language. Record how confident she is in public speaking.

Reflect

Everyone was impressed with the girls! The women they invited to hear about their plans for the future listened well. Many of the women have offered to help the girls achieve their ambitions.





Unit 10: Session 2

Numeracy activity 10.1: Using diagrams to solve multistep problems using diagrams

35 minutes

Plan

Write the learning objective on the board.

Learning objective

• To use diagrams to support problem solving

Do

Guided work

25 minutes

Point to the learning objective and tell the girls what they are learning in this activity.

- 1. Remind the girls that in the previous session they used diagrams to help to solve problems. Now they will solve problems with more than one step.
- 2. Explain to the girls that in this part of the activity they are finding out what steps are needed to solve a problem, and in the next part they will work out the answers.
- 3. Ask a girl to read this problem out loud from the workbook (page 96).

Dee buys four apples and two oranges for her journey. Each apple costs 56c and each orange costs 76c. How much does she spend?

4. Ask another girl to read the problem again. As they read each step, draw a diagram to show each step of the problem.

	4 apples		2 or	anges 人	
56c	56c	56c	56c	76 c	76c
4 apples = 56 + 56 + 56 + 56 = 56 x 4 = ?			2 oranges = 76	+ 76 = 76 x 2 = ?	
Total cost =					



- 5. Ask the girls to work in pairs to write the steps needed to solve the problem on their chalkboards.
- 6. On a count of '3, 2, 1', everyone holds up their chalkboard to show the three steps in the problem.

Step1: 4 x apples

Step 2: 2 x oranges

Step 3: apples + oranges

6. Repeat for the second problem.

Aneni compares the area of two different solar panels. The bigger panel is 1000 cm by 200 cm. The area of the smaller panel is 1500 cm x 100 cm. What is the difference in the area?

Panel 1

Area of solar panel 1 = 1000 x 200 =		
Area of solar panel 2 = 1500 x 100 =	Difference = ?	

Panel 2

Step1: Area of solar panel 1

Step 2: Area of solar panel 2

Step 3: Area of solar panel 1 subtract Area of solar

panel 2



Independent work

10 minutes + time to finish at home

- 1. Answer the three problems in the workbook. Encourage the girls to draw a diagram, write the calculation and then work out the answer.
- 2. After 10 minutes, stop the girls and ask them to complete the rest at home.

Numeracy activity 10.2: Using 'try and improve' as a strategy for solving problems

25 minutes

Plan

Write the learning objective on the board.

Learning objective

To use 'guess and check' and 'try and improve' as a strategy for solving problems

Do

Guided work

10 minutes

Point to the learning objective and tell the girls what they are learning in this activity.

- 1. Explain to the girls that different kinds of problems require different strategies and in this part of the lesson you will be using a strategy called 'try and improve'. This is used for problems where you need to try different possibilities to find the answer.
- 2. Put the girls in twos or threes and draw this diagram on the board.
- 3. Ask them to put three numbers in boxes so that the top two boxes total 20, the bottom two total 43 and the top and bottom boxes total 37.
- 4. Encourage the girls to think of an answer that might work and then try it.
- 5. Keep a record of the guesses that girls have tried by encouraging them to come forward and write them on your chalkboard
- 6. If one of the pairs suggests they have found a solution, ask them to read it out so the other girls can check (rather than checking it yourself).

Independent work

15 minutes

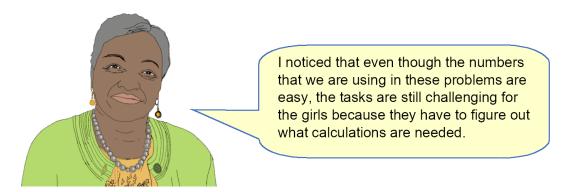
- 1. The girls can continue to work in pairs on the problem above.
- 2. Girls who finish can choose one of the other problems in the workbook to try.
- 3. Encourage the girls to work on the other problems at home.



Assess

Make notes in your **Progress Book** about girls who can make links between the mathematics they have learned and the problems they are trying to solve.

Reflect



Numeracy activity 10.3: Solving problems with lots of possible answers + Progress Assessment

20 minutes + 40 minutes Progress Assessment

Plan

Write the learning objectives on the board.

Learning objectives

- To solve problems with lots of possible solutions
- To work systematically

You will need:

✓ a set of flashcards with these scores

0-0	1-0	2-0
0-1	1-1	2-1
0-2	1-2	2-2



- ✓ some more blank flashcards
- ✓ chalkboards for each pair.

Do

Guided work

15 minutes

Point to the learning objectives and explain that in this session they will be learning to work systematically to solve problems with lots of possible answers. Help the girls to understand the word 'systematically' by explaining that it means to find a system to help solve the problem.

- 1. Share the netball scores problem with the girls and ask for some suggestions as to what the half-time scores might have been.
- 2. Ask the girls to work in pairs to list different possible scores on their chalkboards.
- 3. When the girls have several answers, stop and ask the girls to share with another pair. Check and see if they have the same possibilities or if they can add any new ones to their list.
- 4. Ask them to look for more possible scores. Stop when one pair has found all possible scores (there are nine).
- 5. Bring the girls together. Ask the pair of girls who have found all possibilities to convince the rest of the group that they have them all. They can draw on the chalkboard to support their explanation.
- 6. Use your flashcards to demonstrate how they could find all possibilities by working systematically. This means that you fix one score and then change the other score in order. The red numbers show how the 0 has been fixed in the first column.

0-0	1-0	2-0
0-1	1-1	2-1
0-2	1-2	2-2

The score at the end of the

What could the half- time scores

netball match was 2-2.

have been?

7. Ask: 'What if the score was 3-3? What other possible scores do we need to add?' Each time one of the girls suggests a score, write it on a flashcard and ask the girls where it should be added to the set of flashcards.



0-0	1-0	2-0	3-0
0-1	1-1	2-1	3-1
0-2	1-2	2-2	3-2
0-3	1-3	2-3	3-3

Independent work

5 minutes

- 1. Ask the girls to read the problems in question 3 on page 99 of the workbook (Chico's cards and Vimbai's numbers) with a partner and discuss the strategy they could use.
- 2. Ask the girls to solve the problems at home. Encourage the girls to work with somebody else at home, like Vimbai worked with her grandmother in the story.

Assess

Check that the girls can see what stays the same and what changes in each flashcard.

Reflect



Progress Assessment

40 minutes

- 1. Ask the girls to try to solve the three **progress assessment problems** on page 100 of the workbook (question 4) using the strategies they have learned in Units 9 and 10.
- 2. As the girls work, move around the room observing each girl's progress. Record her achievement on the **Numeracy Progress Assessment form (Appendix C)**.



- 3. If she has already tried the problem, look at what she has done. If she has not, ask her to describe the approach she will take. The focus is on the approach, and not the answer.
- 4. Record:
 - how confident she is in attempting each problem (not confident, quite confident, very confident)
 - if she is attempting the problem in an appropriate* way (yes/no)
 - if she does not know how to attempt any of the problems (record problem number and strategy).
- * The girls' approaches may differ somewhat.
 - In problem 1, you may expect to see a diagram similar to those used in **Numeracy** activities 9.4 and 10.1.
 - In problem 2, you may expect to see the girls use the fact that the initial numbers in the example were too big and to try smaller ones (and continue from there). The focus here is on the 'try and improve' approach and not on getting the 'correct' numbers.
 - In problem 3, you may expect to see the girls pick a number and then try it with each other number in the pair. For example, 2 + 1 then 2 + 4 and 2 + 8. You are looking for a systematic approach.



Appendix A Icebreakers and energisers

For each session, choose one icebreaker and one energiser to play with the girls. Two hours is a long time for girls to sit still and concentrate. These activities are designed to increase the girls' energy and help them work together.

Have you ever

Make a circle of chairs in the room, one for each girl, and then take one away. One person stands in the middle and shouts a question starting with 'Have you ever...?' For example: 'Have you ever eaten sadza?' Any girl who has eaten sadza then jumps up and moves to a different empty seat (made available by someone else who has moved). The last girl who is left without a seat stands in the middle to ask another question beginning with 'Have you ever...?'

Roll the ball

This can be used to practise any language that requires a question/answer pattern. Girls roll the ball to each other and have to say the appropriate sentence as they roll the ball. For example: 'Hello.' 'Hello.' 'What's your name?' etc. Remember the sentences they practise should be fairly short.

Make the number (10 mins)

This competitive activity provides practice in adding and subtracting one-digit numbers.

- 1. Write the numbers 2, 4, 8 and 3 and + and on the board.
- 2. Ask the whole group how they could make 7 using some of these numbers. Agree with them a correct answer, for example 3 + 4 = 7.
- 3. Now ask the whole group if they can make 9. Before starting the main part of the activity, explain that there is more than one way to make this number (for example 2 + 4 + 6 3; 8 + 4 3).
- 4. Arrange the girls into pairs.
- 5. Call out each of the following numbers one at a time:

1 5 10 13 14 15 17 20

- 6. Give each pair 20 seconds to work out an answer and write it down. Tell the girls that they can use each number and symbol more than once if they want to.
- 7. Ask each pair in turn to hold up their answer and award one point for each correct answer. Reinforce that there can be more than one way of making each number.
- 8. The pair with the highest number of points wins the game.

Bird nests (10 mins)

Start by drawing three simple drawings of birds sitting on their nests on the board, e.g.









- 1. Divide the girls up into groups of three or four.
- 2. Provide each group with 9 pebbles or counters to represent eggs.
- 3. Say: 'These three birds have laid a total of 19 eggs between them. Each bird has laid an odd number of eggs. How many did each bird lay?'
- 4. If necessary, quickly revise what an odd number is.
- 5. Then set each group the task of working out how many eggs each might have laid.
- 6. Explain that there is more than one answer, and you want them to find as many possible.
- 7. After 10 minutes, bring the groups together to share their answers.

I looked outside my house ... (10 mins)

This activity is a variation of 'I went to the market ...' but without the alphabetical order element, and in its place the requirement for participants to be imaginative.

- 1. Ask the group to think about something they would not expect to see outside their house. Encourage them to come up with the most imaginative ideas they can.
- 2. Ask the girls to stand around in a circle, and join the circle yourself.
- 3. Start off the game by saying your own example, such as: 'I looked outside my house and I saw an elephant sitting on a chair.'
- 4. The girl to your right repeats your sentence, and adds an idea of her own, for example: 'I looked outside my house and saw an elephant sitting on a chair and a big red car.'
- 5. The next girl then adds her idea to the sentence: 'I looked outside my house and saw an elephant sitting on a chair, a big red car and a monkey dancing.'
- 6. Repeat until all the girls have added to the story. If any girls forget some of the things, the rest of the group can help them out.
- 7. If there is time, start a new story, but going around the circle in the opposite direction.

Words within words (5-10 mins)

- 1. Write the word 'elephant' on the board.
- 2. Ask: 'How many shorter words can we make from this word?'
- 3. Help the girls identify words if necessary (e.g. the, hat, ant, net, help, heat ...).
- 4. Divide the girls into teams, and set them a challenge with a different word (Bethsaida, grandmother, understand and destination are all suitable words that they girls will be familiar with from the SAGE stories).

Icebreaker: The longest line (10 mins)

The aim of this game is to see who can make the longest line using just their bodies, the clothes they are wearing and a piece of string.

- 1. Ask the girls to make a group of four. Give each group the piece of string.
- 2. Explain that they have 5 minutes for the challenge. They are going to use anything they have on them to create the longest possible line. They can remove items of clothing, but CEs need to ensure they are not removing inappropriate layers. So, for example they could use a jacket, a shoelace, a scarf etc.



- 3. Show them the starting line every group will need to start their line from this place.
- 4. The girls can stand or lie down whatever they think will make the line longer. However, there can be no gaps in the line: each person must be in contact with another person either by touching them, or linked by a piece of clothing or the string.
- 5. They can also use the piece of string to make their line longer.
- 6. Time the challenge and say 'Stop! Determine the winning team.
- 7. The team that wins is the one that forms the longest line.

What's the question? (10 mins)

This energiser needs to be placed in a unit a little way through the module after enough characters have been introduced.

- 1. Divide the girls into pairs, and give them a list of names of people from the stories one at a time.
- 2. For each name, ask each pair to talk together and decide on a question for which the name would be a suitable answer. Encourage them to refer to their workbooks to help decide on their questions.
- 3. If necessary, model one or two questions and answers with the whole group before starting on the paired work.
- 4. Each pair then shares their question with the rest of the group.

Slow breathing (5 mins)

- Invite everyone to sit comfortably and take ten calming breaths. Tell them to count silently and slowly in their heads, and to close their eyes if they feel comfortable doing so.
- 2. Repeat, then ask them how it makes them feel. Draw out any relevant vocabulary (e.g. *relaxed*, *peaceful*).
- 3. Tell them they are now going to do something a little more complicated and ask them to listen carefully as you tell what you want to do:
 - take a slow breath for the count of four
 - hold the breath for a count of twelve, before
 - breathing out slowly for a count of eight.
- 4. Repeat, giving instructions and then invite them to do it again once or twice in their own time, counting in their heads).
- 5. Again, ask them how this made them feel, and then explain that this kind of breathing exercise is very good for helping to improve concentration and clear thinking.

Write your name (5 mins)

- 1. Ask all of the girls to face you.
- 2. Instruct them to write their first name in the air with an imaginary pen or pencil.
- 3. Then ask them to write their last name in the air with their opposite hand
- 4. Next, ask them to write both their first and last names, but with their hands behind their backs and pretending to have a pen in their mouth to write their names.



Possible extensions:

- 1. Ask them to write some more words (for example to reinforce some vocabulary learned in the module stories).
- 2. Ask them to split into pairs and write some words for their partner to work out.

Give a compliment (5 mins)

- 1. Every girl sticks a sheet of paper to her back.
- 2. Ask the girls to each write down a compliment on the paper on the backs of every other student (this could just be one word, e.g. friendly, cheerful, kind).
- 3. Afterwards the girls can read their paper and smile at all the compliments they have been given.

Birth song

Those born in January, stand up, stand up.

And dance around and dance around and show your happy day.

And dance around and dance around and show your happy day.

(Clap in time, sing the song and girls go into the centre and dance for the repeating two lines.) Go through each month of the year and encourage the girls to join in with their month of the year.

Counting Up

The aim of this game is for the group to count up to a given number (for example 20) without going around the group in any particular/predefined order. No conferring or looking at each other to signal. Anyone starts at 'one' and anyone can go next with 'two' and so on. If more than one person shouts out a number at the same time, the group starts again from 'one'.

This or that? (10 mins)

This is an activity for the whole group. Make sure you have plenty of space. It is a good way of helping the girls learn about each other and to build their confidence.

- 1. Ask a question with two answers.
- 2. Girls need to move to one side of the room or the other depending on their answer. They can find things they have in common.
- 3. Keep the questions light-hearted! For example:
 - · Which is better, being inside or being outside?
 - Literacy or numeracy.
 - Football is fun. Yes or no?
 - Would you rather play football or watch football?
 - Which is tastier, avocado or cucumber?
 - Blue is nice than green. Yes or no?
 - Which song is better, [you will need to choose two songs the girls know]?

Encourage the girls to talk as you play and share their preferences. Ask the girls for question suggestions.



Appendix B: Literacy/Learning English Progress Assessment Form

Literacy/Learning English: to prepare and give a short talk/speech to an audience

- 1. Copy this form into your **Progress Book**.
- 2. As each girl reads her notes or sentences and then shares her reasons for wanting that future, record her achievement.
- 3. Record how well she:
 - · reads her notes or sentences in English or the home language
 - shares her reasons for wanting this future. Record if she does this in English or the home language. Record how confident she is in public speaking.

Learning Hub					
Community Educator			District Coordinator		
Name ID number	Future	Reads notes/ sentences in home language	Reads notes/ sentences in English	Gives reasons for wanting this future	Comments
Patience Dube 011209	Taxi driver	Answered questions in home language.	Read three sentences in English.	To earn money to look after her family.	Very confident and lively talk.
Clara Farai 011207	Business woman	Spoke clearly in home language.	Used home language	To help other women.	Prepared ideas orally. Spoke clearly in front of the audience.
Date	1	1	Signed	1	1



Appendix C: Numeracy Progress Assessment Form

Numeracy: Using appropriate problem-solving strategies

- 1. Copy this form into your **Progress Book**.
- 2. Ask the girls to try to solve the three **progress assessment problems** on page 100 of the workbook using the strategies they have learned in Units 9 and 10.
- 3. As the girls work, move around the room observing and recording each girl's achievement.
- 4. If she has already tried the problem, look at what she has done. If she has not, ask her to describe the approach she will take. The focus is on the approach, and not the answer.
- 5. Record:
 - how confident she is in attempting each problem (not confident, quite confident, very confident)
 - if she is attempting the problem in an appropriate way (yes/no)
 - if she does not know how to attempt any of the problems (record problem number and strategy).



Learning Hub								
Community Educator		District Coordinator						
	Using appropriate problem-solving strategies							
Name ID number	How confident? (very, quite, not at all)	Appropriate way of approace problem (Y/N)	ching	Comments				
Patience Dube 011209	Like this maybe	or like						
Clara Farai	Prob. 1 very	Y N		Used diagrams effectively to solve problem				
011207	Prob. 2 not at			Just guessing, needs work on number sense				
	all Prob. 3 quite	Shows some idea – taking one num a time, but a bit muddled				one number at		
Comment								
Most of the girls seemed to be able to use the diagrams successfully – it really helped them understand the problems. Try and improve was a challenge for most of them – needs more work.								
Date			Signe	d				

Acknowledgements

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Finger millet picture, Unit 4 Numeracy activity 4.2: Strategies for estimation Taken by Gaurav Dhwaj Khadka. https://commons.wikimedia.org/wiki/File:Finger_Millet_Seed.jpg. This file is licensed under the Creative Commons Attribution Licence https://creativecommons.org/licenses/by/4.0/

Diagram in Unit 1, Numeracy activity 1.2: Introducing adding and subtracting fractions adapted from IGATE project (Improving girls access through transforming education) Foundational Numeracy Module 3 Unit 2 and reshared under CC-BY-SA www.wvi.org/education-and-life-skills/igate-improving-girls-access-through-transformingeducation

Diagram in Unit 7, Numeracy activity 7.1: Tenths and hundredths adapted from IGATE project as above, IGATE Foundational Numeracy, Module 7, Unit 1.2, Page 7 and reshared under CC-BY-SA

Diagram in Unit 7, Numeracy Activity 7.4: Money matters adapted from IGATE project as above, Foundational Numeracy, Module 4, Unit 1, Page 8-10 and reshared under CC-BY-SA

Diagram in Unit 8, Numeracy activity 8.2: Affording repayments adapted from IGATE project as above, Foundational Numeracy, Module 5, Unit 3.3, Page 32-35 and reshared under CC-BY-SA

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