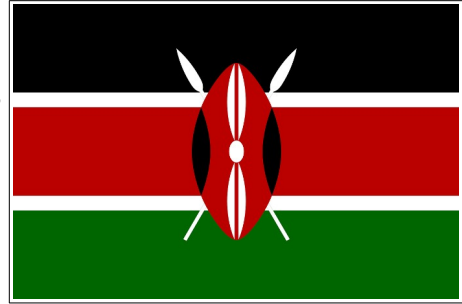


Setting

Fruit from the Garden is set in the country of Kenya, which is in the region of East Africa. The mountain visible in the background is Mount Kilimanjaro, located in the neighbouring country of Tanzania. Mount Kilimanjaro is a dormant volcano. It is the tallest mountain on the continent of Africa. It is also the tallest free-standing mountain (meaning it is not part of a mountain range) in the world. Encourage your students to locate Kenya, Tanzania, and Mount Kilimanjaro on a world map, if you have one.

The flag of Kenya is seen on Ostrich's bag on **page 2**.

The animals are wearing T-shirts, tank tops/singlets/vests, an over-shirt, shorts, and overalls, which fruit-pickers in Kenya might wear while working. You can ask your students, "why do you think Ostrich is wearing a hat?" In hot, sunny climates, like Kenya, it is important to cover your skin with clothes or sunscreen to avoid sun-burn and heat-stroke. This is a good opportunity to remind your students about any sun-safe rules in place at your school.



Characters

The animals in the story are modelled on species of mongoose, ostrich, and giraffe found in Kenya. Depending on where you are in the world, your students may have seen other mongoose, ostriches, or giraffes in real life or in fiction. What makes the animals in the story different from those they have seen before? Consider the size of the animal, colour, markings, ears (size, shape), tail (size, shape, position, thickness), legs (length, width), feet (hoofs or paws, number of toes), horns, etc. In particular:

- the shape of the markings on giraffes differ between species
- the colour of ostriches vary between males and females (the one in the story has the black and white feathers of a male)
- the Masai ostrich has a pink/red neck, while other subspecies have grey necks.



Common dwarf mongoose



Masai ostrich



Reticulated giraffes

Some students may guess that the first animal is a meerkat. The mongoose is similar to a meerkat (alongside), but you can point out that a meerkat has a different shaped face, and has markings on its eyes, ears, back, and tail.



Students might notice that the animals are walking in height order on **page 2**. The animals are not drawn precisely to scale, but they do give the correct order. You might like to revisit this book when you study **measurement**. We do not study units at this year level, so it will not be meaningful to give lengths in centimetres or metres. However, you can compare the sizes of the animals with familiar objects:

- The Ethiopian dwarf mongoose (native to Kenya) is about as tall as a desk ruler (18-28 centimetres). It is a *small* animal.
- Female ostriches are about as tall as a very tall person (1.7-2 metres), and male ostriches are taller than the classroom doorway (2.1-2.8 metres). It is *tall*, but it is *shorter* than a giraffe.
- Giraffes are taller than a bus (males 4.8-5.5 metres, females 4.3-4.8 metres). It is a very *tall* animal.

Story

Pineapples, bananas, and oranges are all commonly farmed fruit varieties in Kenya. Depending on where you are in the world, these fruits may be unfamiliar to your students. You could ask them if they have seen or tasted any of these fruits before. If possible, being mindful of allergies, bring these fruits into class for your students to taste. You can discuss:

- what parts of each fruit are edible and inedible
- how we prepare each fruit to eat it
- the taste and texture of the fruit, using describing words.

Farming is very important in Kenya. Most people who live in Kenya are involved in farming, either growing their own food or being employed as a farmer. Other important products farmed in Kenya include tea and coffee.

Mathematical concepts and language

A variety of words are used throughout the story to indicate counting and place values. Students should be able to recognise and understand these words wherever they appear.

Word or phrase	Synonyms	Definition
how many?		This is an adverbial phrase which asks the reader to find a particular amount. In this case, we want the reader to count the pieces of fruit we are considering.
in total	altogether	This is a prepositional phrase which refers to an <i>entire</i> amount. In this case, we use it to state the answer to the question of “how many ____ do we have?”.
left	leftover, remaining	This is an adjective or descriptive word for something that we <i>leave out</i> . In this case, it refers to the pieces of fruit that are not placed into groups of 10, because we do not have enough to make another <i>whole</i> group of 10. 10 units make 1 ten, so the objects which are “left” are units.

Understanding place values is essential for students to progress in mathematics. In this book, we consider units and tens. Some curricula use the word “ones” instead of “units”. We have chosen to use “units” across our books.

Combining tens and units is an addition process fundamental to the base 10 place value system, but this is not the time to discuss this. It is enough to discuss the place values.

Note the importance of *zero* units on **pages 14-15**. The idea of zero can be difficult for students to grasp, particularly with place values. Students should understand that zero is related to “nothing”. For that reason, their instinct may be to omit the “0” when the number is written. In the place value system, we need “0” to tell us what a place value *means*. We cannot just leave off the “0” units or else we change the value of the tens digit.

Visual aids are extremely helpful for younger students, especially visual and tactile learners. Encourage students to *count* the fruit illustrated on **pages 5-6, 9-10, and 13-14**, *before* looking at the arrays on **pages 7, 11, and 15**.

For students requiring extension

Some of the students in your class may be able to find the total of each type of fruit on **pages 5, 9, and 13** by identifying groups or clusters of fruit, then using addition.

- On **page 5**, students may notice a row of 6 pineapples, a row of 3 pineapples, and 4 other pineapples.
 $6 + 3 + 4 = 13$ pineapples.
You can talk through the sum like this: “6 plus 3 is 9, plus another 4 is 13 pineapples”. Other groupings are possible.
- On **page 9**, there are 4 groups of 5 bananas, and 4 single bananas.
 $5 + 5 + 5 + 5 + 4 = 24$ bananas.
Alternatively, students may count up in 5s (“5, 10, 15, 20”), then add on 4.
- On **page 13**, there are 2 rows of 10 oranges, 1 row of 9 oranges, 1 row of 6 oranges, 1 row of 3 oranges, and 2 single oranges held by the animals.
 $10 + 10 + 9 + 6 + 3 + 2 = 40$ oranges.

Subitising (recognising a number of objects on sight, without counting) is an important skill that will develop with practice as students progress in mathematics. Encourage students to subitise the row of 3 pineapples on **page 5**, and the groups of 5 bananas on **page 9**.