

Baby elephant on a see-saw

Name

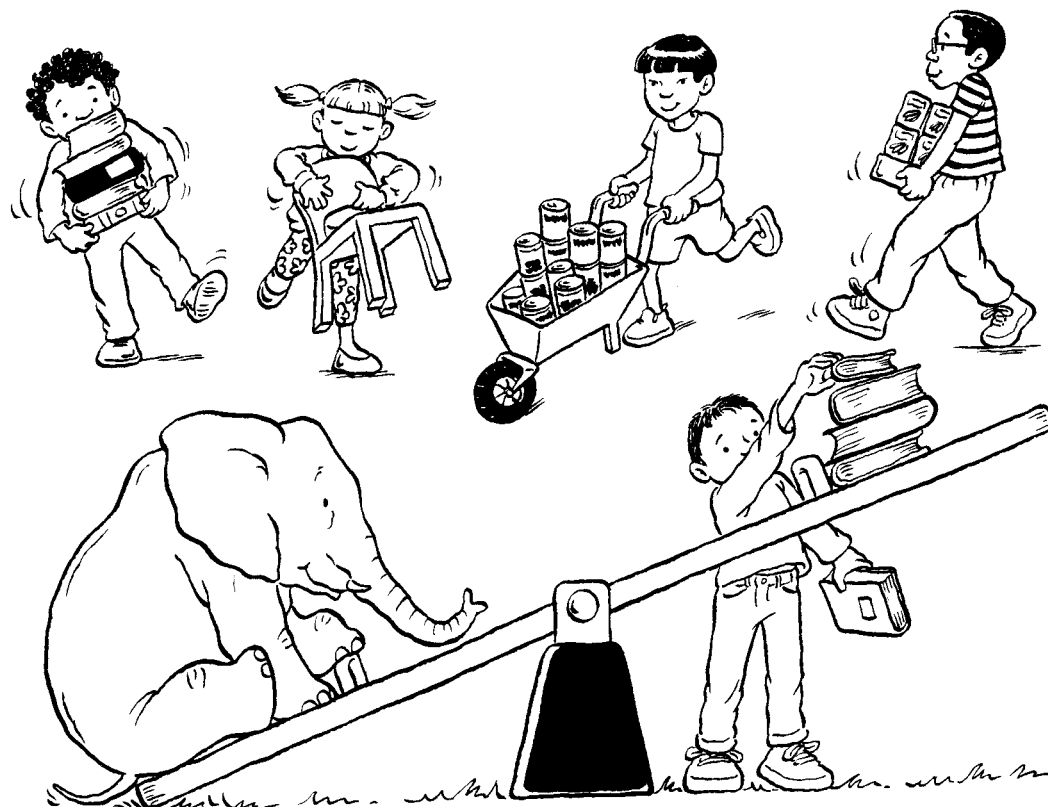
PCM
16

You need: paper

The average mass of a baby elephant is 120 kg.

Make a display of things that you could put on the other end of the see-saw to balance the mass of the elephant.

Show your calculations. Record each idea neatly on paper.



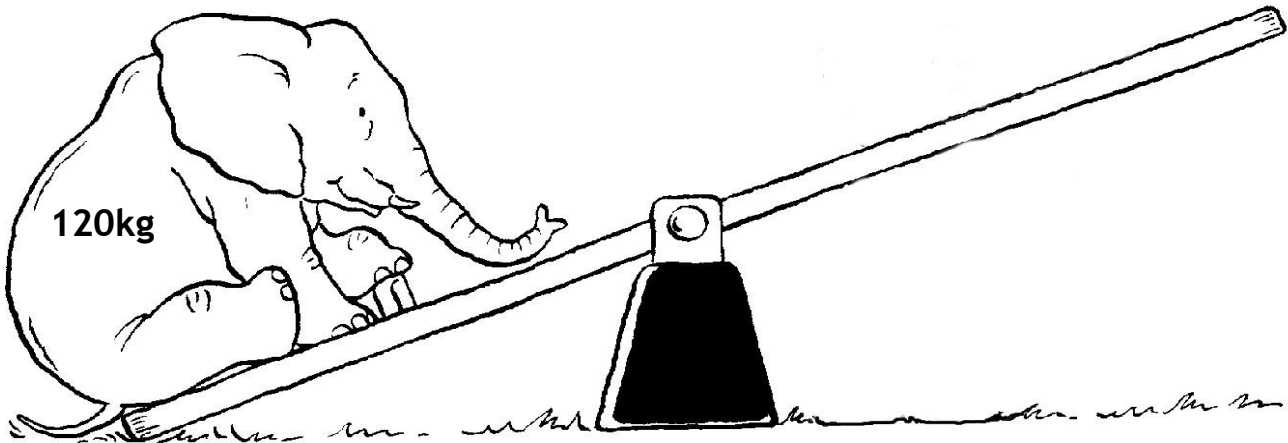
Baby elephant on a see saw

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Learning Objective: To be able to

- understand, read and write standard metric units for mass, including their abbreviations (kg, g) and relationships between them
- record estimates and readings from scales to a suitable degree of accuracy
- convert kg to g and vice versa

The object:	Mass in kilograms and grams	Mass in kilograms	Mass in grams
Calculation: how many of the object would be needed to balance the baby elephant?			



UNIT
16

Baby elephant on a see-saw

The average mass of a baby elephant is 120 kg. Make a display of things that you could put on the other end of the see-saw to balance the mass of the elephant.

Teaching objectives

- ◆ using grams and kilograms
- ◆ searching for information
- ◆ selecting maths

Resources

- ◆ PCM 16
- ◆ balance scales and masses
- ◆ tins and packages of foods
- ◆ paper
- ◆ ruler, card, pencil and small objects (for Follow-up)

Formative assessment

Can the children find the masses of a variety of objects and compare them with a larger mass?

Getting started

Show the children the food packages and ask them to read the masses. Ask them to estimate how many of each package would balance a 1 kg mass. Use the balance and masses to test their ideas using a kilogram mass on one side and the package or sets of masses equivalent to the package on the other. For example, if a package weighs 400 g, pairs of 200 g masses could be used to represent the package.

Key teaching point: One kilogram weighs the same as 1000 grams.

Independent task

Give the children a copy of PCM 16. Tell them to find different sets of objects that could be used to balance the elephant, for example, *600 tins of baked beans*. Tell them to show their calculations and to present each idea neatly on paper so that it can be used as an illustration in a story book about the elephant.

Developing the problem

- Invite children to show examples of the sets of objects they have found and to explain how they worked out that this would balance the mass of the elephant.
- Show the children how to use repeated addition and multiplication to work out the equivalent masses. Show them how multiples of 10 or 100 of any object can be calculated quickly.
- Their next task is to work with a partner to make a story book about the elephant on the see-saw and their efforts to make it balance.

FOLLOW-UP

- Find out the mass of a giraffe or a dinosaur. Explain how you would get such an animal to balance on the see-saw.
- Make a see-saw. Put a mass on one end and find small objects to make it balance.

Drawing together

Invite children to explain what they have found. Draw their attention to examples that clearly show the calculations used to reach the answer. Show the children how to use division to check their calculations.

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Resources worksheet balance scales and masses tins and packages of foods paper ruler, card, pencil and small objects (for Follow-up)

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