

4.56 The metric system

Topic: Measurement

Subtopic: Weight

Activity type/skill: Ask and answer

Literacy focus: Speaking

Genre: Expressions of weight

Objective

- Speak about weights.
- Produce accurate, practised, prepared speech.

What you need

- Student worksheet (see next page)

What to do

1. Ask the students to fold their worksheet lengthwise.
2. Have the students work in pairs. Ask Student A in each pair to only look at the text about the metric system and Student B to only look at the top set of questions. Give them some time to read.
3. Have Student B read the first question aloud and Student A answer the question as best they can. The pairs should practise their questions and answers until they are confident that they can ask and answer clearly and accurately.
4. Have each pair do the question and answer as if it were a radio interview in front of the class. If there is more than one pair, you could let them work together to prepare a super-interview.
5. Give praise for:
 - accurate factual information
 - clear answers
 - fluent and accurate questioning.
6. Do the same for the second text about the standard kilogram, reversing roles.

Extending the activity

- Make up sets of questions for other short texts.

The metric system

In 1799 the metric system was introduced in France. Before that weights were inaccurate and divided into different numbers of parts.

The metric weighing system used a base of ten. Parts were divided into tens, hundreds and thousands.

This made it much easier to add, multiply, subtract and divide weights. It used new weights called grams and kilograms.



What was introduced in France, in 1799?

What was wrong with the old system?

What is the base of the metric system?

What were the parts divided into?

What were the new weights called?

The standard kilogram

Scientists decided that a kilogram was to be the weight of water used to fill a ten centimetre cube. They thought this would be an easy way to check weights because water was so easy to find.

Then scientists found that this was not accurate enough because the container was affected by heat and cold. They made a special cylinder from two metals that were not affected by heat or cold and filled it with water.

Today a cylinder of water weighing one kilogram is kept in France at the International Bureau of Weights and Measures. It is kept in a special glass case.



What did scientists decide a kilogram should be?

Why was this an easy way to check weights?

Why was that ten centimetre cube not accurate enough?

What did they make instead?

Where is the cylinder kept now?