

Measurement

Selected National Curriculum Programme of Study Statements

Pupils should be taught to:

- choose and use appropriate standard units to estimate and measure length/height in any direction (m/cm); mass (kg/g); temperature ($^{\circ}\text{C}$); capacity (litres/ml) to the nearest appropriate unit, using rulers, scales, thermometers and measuring vessels
- solve simple problems in a practical context involving addition and subtraction of money of the same unit, including giving change

The Big Idea

We need standard units of measure in order to compare things more accurately and consistently.

Mastery Check

Please note that the following columns provide indicative examples of the sorts of tasks and questions that provide evidence for mastery and mastery with greater depth of the selected programme of study statements. Pupils may be able to carry out certain procedures and answer questions like the ones outlined, but the teacher will need to check that pupils really understand the idea by asking questions such as 'Why?'; 'What happens if ...?'; and checking that pupils can use the procedures or skills to solve a variety of problems.

Mastery

Holly uses a £1 coin to buy a pack of stickers. Here is the change she was given.



How much did the pack of stickers cost?

Mastery with Greater Depth

I spend £2 on a drink and sandwich. The sandwich costs 80p more than the drink. How much does the sandwich cost?

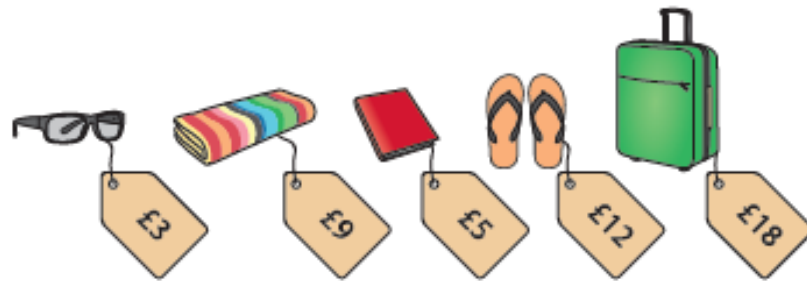
Grace uses a £1 coin to buy a can of drink which costs 80p. She is given three coins in change. What coins could she have been given?

Grace uses a £2 coin to buy a can of drink which costs 85p. She is given four coins in change.

Find all the possible combinations of coins she could have been given.

Mastery

Sid says, 'I have bought 2 items for my holiday.
One item cost £9 more than the other.'
What might Sid have bought?
The _____ and the _____.



Look at these coins. How could you make up the same total amount using just one type of coin?



Mastery with Greater Depth

Sid says, 'I have bought 2 items for my holiday.
One item cost £9 more than the other. I spent over £15.'
What two items did Sid buy?
The _____ and the _____.



Make up your own problems using the holiday items.

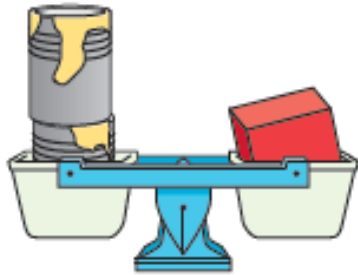
Sam says I can make 97p using just four coins. Is he correct?

Explain your reasoning.

Mastery

This box weighs 10 kg.

How much does each tin of paint weigh?



How long is the pencil?



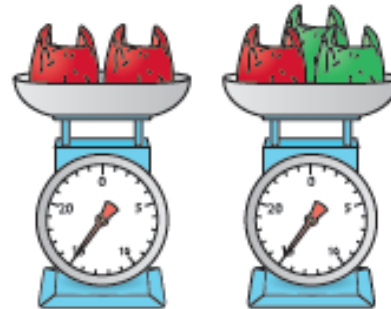
The pencil is _____ cm long.

Mastery with Greater Depth

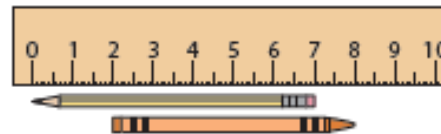
What is the mass of two red bags?

Which is heavier, the red bag or the green bag?

Explain your reasoning.



How long is the crayon?



The crayon is _____ cm long.

How much longer is the crayon than the pencil?

Mastery

Here is a picture of a 1 litre bottle and a 2 litre bottle both with some water in them.

What's the same? What's different?



Mastery with Greater Depth

Here is a picture of a 1 litre bottle and a 2 litre bottle with some water in them. What's the same? What's different?



Which of these clock faces shows a time between 5 o'clock and 7 o'clock?



Jack says, 'There isn't any point in having a minute hand on a clock because I can still tell the time without it.'

Do you agree with him?

Explain your answer.

