

Discussion Problems

Step 1: Measure Length (cm)

Teaching note: Q1 and Q2 require children to measure; therefore, a ruler will be required and precise measurements might be dependent on printer settings.

National Curriculum Objectives:

Mathematics Year 2: (2M2) [Choose and use appropriate standard units to estimate and measure length/height in any direction \(m/cm\); mass \(kg/g\); temperature \(° C\); capacity \(litres/ml\) to the nearest appropriate unit using rulers, scales, thermometers and measuring vessels](#)

About this resource:

This resource has been designed for pupils who understand the concepts within [this step](#). It provides pupils with more opportunities to enhance their reasoning and problem solving skills through more challenging problems. Pupils can work in pairs or small groups to discuss with each other about how best to tackle the problem, as there is often more than one answer or more than one way to work through the problem.

There may be various answers for each problem. Where this is the case, we have provided one example answer to guide discussion.

We recommend self or peer marking using the answer page provided to promote discussion and self-correction.

More [Year 2 Length and Height](#) resources.

Did you like this resource? Don't forget to [review](#) it on our website.

Measure Length (cm)

1. Using a ruler, measure the height of the glue stick to the nearest centimetre.

Look around the room and investigate which items match the following descriptions.

An item that is taller than the glue stick.

An item that is shorter than the glue stick.

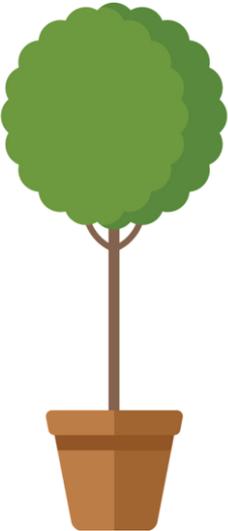
An item that is half the height of the glue stick.

An item that is twice the height of the glue stick.



DP

2. Using a ruler, measure the height of the small world garden objects.



A.



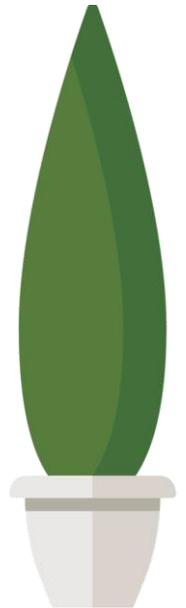
B.



C.



D.



E.

Explore which two objects have a total of 10 cm. Which two objects have a total of 11 cm? Find all the possible combinations.

DP

Measure Length (cm)

1. Using a ruler, measure the height of the glue stick to the nearest centimetre. **8 cm**

Look around the room and investigate which items match the following descriptions.

An item that is taller than the glue stick.

exercise book (12 cm)

An item that is shorter than the glue stick.

pencil sharpener (3 cm)

An item that is half the height of the glue stick.

whiteboard eraser (4 cm)

An item that is twice the height of the glue stick.

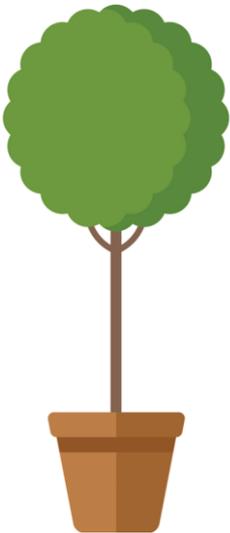
water bottle (16 cm)



Various answers, an example is shown above.

DP

2. Using a ruler, measure the height of the small world garden objects.



A.



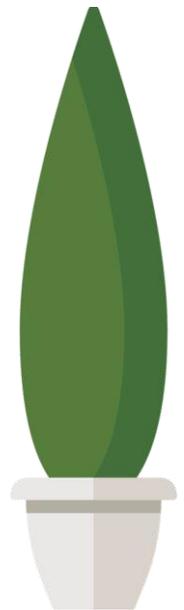
B.



C.



D.



E.

Explore which two objects have a total of 10 cm. Which two objects have a total of 11 cm? Find all the possible combinations.

Various answers, for example: A and B = 10 cm (7 cm + 3 cm), B and E = 11 cm (3 cm + 8 cm)

DP