

Varied Fluency

Step 6: Four Operations with Lengths

National Curriculum Objectives:

Mathematics Year 2: (2M1) [Compare and order lengths, mass, volume/capacity and record the results using >, < and =](#)

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](#)

Differentiation:

Developing Questions to support adding, subtracting, doubling and halving of measures; same measures only.

Expected Questions to support adding, subtracting, multiplying and dividing of measures by 2, 5, 10; same measures only.

Greater Depth Questions to support adding, subtracting, multiplying and dividing of measures by 2, 5, 10; mixed measures (m and cm).

More [Year 2 and Year 3 Length Height and Perimeter](#) resources.

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

Four Operations with Lengths

1a. Ali has a tower that is 40cm long. Kate's tower is double the length of Ali's. Circle how long Kate's tower is.



20cm

80cm

70cm



Not to scale

2 VF

Four Operations with Lengths

1b. Kobie has a pencil that is 20cm long. Ty's pencil is half the size of Kobie's. Circle how long Ty's pencil is.



10cm

20cm

24cm



Not to scale

2 VF

2a. True or false? The shortest animal is 15cm shorter than the tallest animal.



30cm



23cm



15cm



Not to scale

2 VF

2b. True or false? The tallest flower is 30cm taller than the smallest flower.



40cm



10cm



30cm



Not to scale

2 VF

3a. The bridge is 20m long.



If half of the bridge falls down, how long will the bridge be?



Not to scale

2 VF

3b. The rocket is 50m tall.



How tall would it be if it doubled in height?



Not to scale

2 VF

4a. Which two objects added together total 40cm?



snake
25cm



ruler
10cm



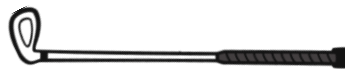
watch
15cm



Not to scale

2 VF

4b. Which two objects added together total 50cm?



Golf club
35cm



hot dog
15cm



boot
25cm



Not to scale

2 VF

Four Operations with Lengths

5a. Sam has a pencil that is 30cm long. Troy's pencil is 5 times shorter than Sam's. Circle how long Troy's pencil is.



6cm

25cm

10cm

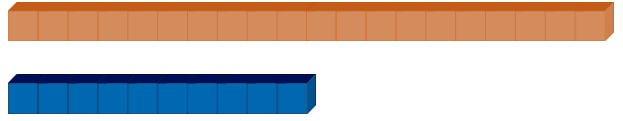


Not to scale

2 VF

Four Operations with Lengths

5b. Rex has a tower that is 10cm long. Liz's tower is 2 times longer than Rex's. Circle how long Liz's tower is.



12cm

22cm

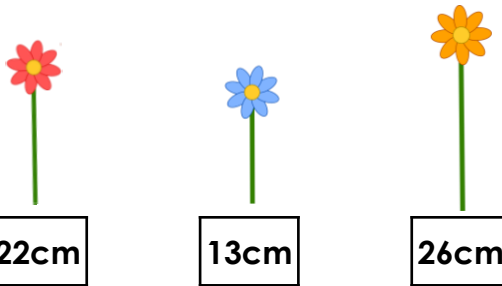
20cm



Not to scale

2 VF

6a. True or false? The tallest flower is 12cm taller than the shortest flower.



22cm

13cm

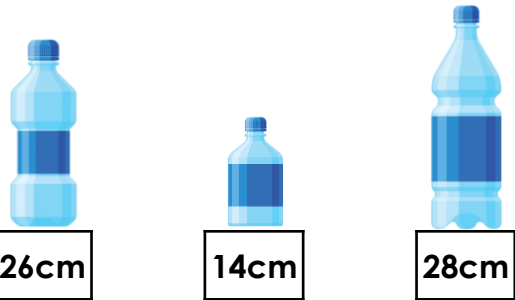
26cm



Not to scale

2 VF

6b. True or false? The shortest bottle is 14cm shorter than the tallest bottle.



26cm

14cm

28cm



Not to scale

2 VF

7a. The tree is 17m tall.



How tall will it be if it grows double in height?



Not to scale

2 VF

7b. The building is 21m tall.



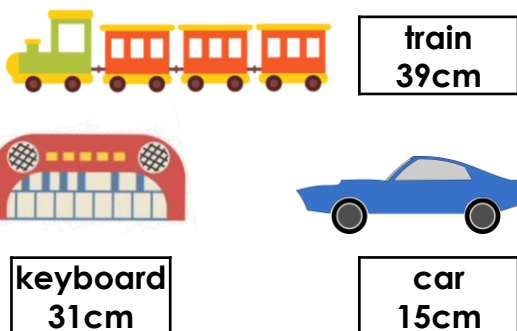
How tall would it be if it doubled in height?



Not to scale

2 VF

8a. Which two objects added together total 70cm?



train
39cm

keyboard
31cm

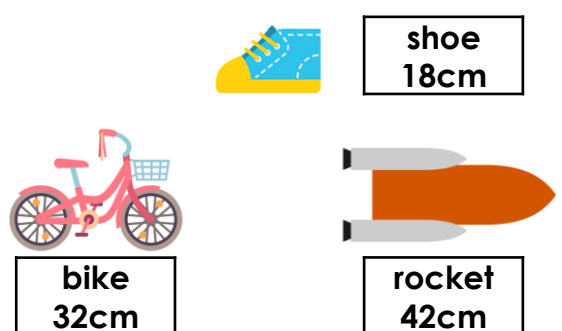
car
15cm



Not to scale

2 VF

8b. Which two objects added together total 60cm?



shoe
18cm

bike
32cm

rocket
42cm



Not to scale

2 VF

Four Operations with Lengths

9a. Ash has a tower that is 1m long. Daisy's tower is double in size. Circle how long Daisy's tower is.



200cm

50cm

100cm



Not to scale

2 VF

Four Operations with Lengths

9b. Paige has a boat that is 2m long. Hettie's is half the size of Paige's. Circle how long Hettie's boat is.



200cm

50cm

100cm



Not to scale

2 VF

10a. True or false? The tallest tree is 3m taller than the shortest tree.



500cm



300cm



6m



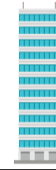
Not to scale

2 VF

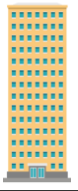
10b. True or false? The shortest building is 7m shorter than the tallest building.



10m



700cm



8m



Not to scale

2 VF

11a. The train is 4m long.



How long in centimetres will it be if it doubles in length?



Not to scale

2 VF

11b. The lorry is 200cm tall.



How tall in metres would it be if it doubled in height?



Not to scale

2 VF

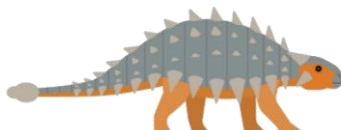
12a. Which two objects added together total 7m?



rod
200cm



crocodile
300cm



dinosaur
4m



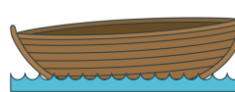
Not to scale

2 VF

12b. Which two objects added together total 900cm?



net
1m



boat
500cm



car
4m



Not to scale

2 VF

Varied Fluency
Four Operations with Lengths

Developing

- 1a. **80cm**
- 2a. **True**
- 3a. **10m**
- 4a. **Snake and Watch**

Expected

- 5a. **6cm**
- 6a. **False. ($26 - 13 = 13$).**
- 7a. **34m**
- 8a. **Train and Keyboard**

Greater Depth

- 9a. **200cm**
- 10a. **True**
- 11a. **800cm**
- 12a. **Dinosaur and Crocodile**

Varied Fluency
Four Operations with Lengths

Developing

- 1b. **10cm**
- 2b. **True**
- 3b. **100m**
- 4b. **Golf club and Hot dog**

Expected

- 5b. **20cm**
- 6b. **True**
- 7b. **42m**
- 8b. **Shoe and Rocket**

Greater Depth

- 9b. **100cm**
- 10b. **False. $700m = 7m$. ($10m - 7m = 3m$).**
- 11b. **4m**
- 12b. **Boat and Car**