Solving problems which involve different measures of length

National Curriculum attainment target

Lesson objective

• Estimate, compare and calculate different measures

• Calculate different measures of length using decimals to one place

Previous related lessons

Unit 6, Week 3, Lesson 1; Unit 6, Week 3, Lesson 2; Unit 6, Week 3, Lesson 3

Prerequisites for learning

Pupils need to:

- be able to convert between kilometres and metres, and between metres and centimetres
- use decimal notation to tenths to record length in kilometres

Vocabulary

distance, height, kilometre (km), metre (m), centimetre (cm)

Future related lesson

None

Success criteria

Pupils can:

choose and carry out appropriate calculations to solve problems

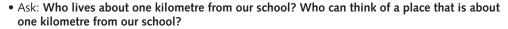


Getting Started

• Choose an activity from Measurement (length and perimeter).

Collins Connect Year 4, Unit 6, Week 3

Teach





- Display: Slide 1.
- Say: Look for the school on this map. Ask: How far is the school from the ferry landing stage? (1½ km) How many metres is that? (1500 m) Who can give me that distance in kilometres using decimals? (1.5 km)



• What is the distance from the school to the village shop in metres? (600 m) In kilometres using a decimal point? (0.6 km)





- Say: Tell your partner how can we write 6 km 400 m in kilometres and then in metres. (6.4 km, 6400 m)
- \bullet Say: Mr McKinnon is a lighthouse keeper. How long is the road from the lighthouse to the village shop? (8 km 900 m)



Ask: Who can give me the distance from the lighthouse to the village shop in kilometres?
(8.9 km) Rounded to the nearest kilometre?
(9 km)

- Say: Tell your partner how many kilometres the village shop is from the farm. (2.8 km) Take feedback and ask children to explain their mental methods.
- Say: The village shop is also the Post Office. Every weekday, Mrs Scott cycles to the ferry landing stage to collect the mail and takes it back to her shop.
- Ask: How many kilometres does she cycle each day? (1.8 km)
- Say: Tell your partner the distance she cycles to collect the mail in two days. (3.6 km)
- Ask: How many kilometres does she cycle to and from the ferry landing stage in five days? (9 km) Ask children to explain their mental methods for five days.



Individualised Learning

Refer to Activity 4 from the Learning activities on page 259. **Pupil Book 4B:** – Page 27: On the map measures

Progress Guide 4: - Extension: Year 4, Unit 6, Week 3, Lesson 4: Patterns and lengths

Resources, ruler (per child)

Plenary



• Display: Slide 2.

• Say: The school is at zero. Ask: Who can come forward and point to the position on the number line for the farm which is 2200 m from the school? (2.2 km)



- Ask: Who can show us the position of the village shop at 600 m from the school? (0.6 km) Can you explain your reasoning to the class?
- Ask: How much further from the school is the farm than the shop? How did you find the **answer?** (2.2 km - 0.6 km = 1.6 km)



- Say: Tell your partner how you can use the number line to check your subtraction. Take feedback and elicit the use of inverse operations to check answers to a calculation.
- Repeat, as above, for the position of the ferry landing stage.



Homework Guide 4

Year 4, Unit 6, Week 3, Lesson 4: Measurement round-up Resources, ruler (per child)