Maths

Calculation Policy

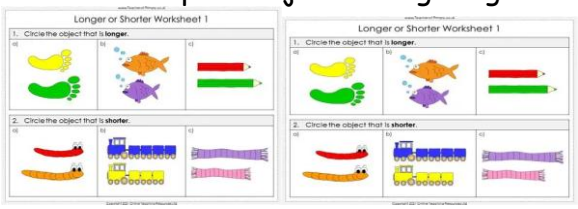
Length

2024

Year One → page 3

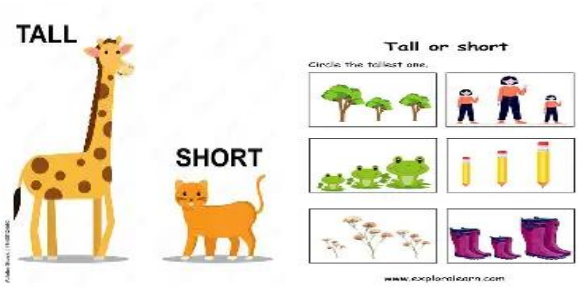
EYFS:

- I can explore length – I can use and understand the vocabulary 'long' and 'short'
- I can compare objects using 'long' and 'short'



Vocabulary: long, longer, longest, short, shorter, shortest, same as

- I can explore height- I can use and understand the vocabulary 'tall' and 'short'
- I can compare objects using 'taller and 'shorter'



Vocabulary: tall, taller, tallest, short, shorter, shortest, same as

Year One:

- I understand the terms 'long' and 'short'
- I can compare objects using 'long' and 'short'

1. Concrete objects
   Pencils
   Ribbon
   Cubes etc

2. Images

- I can compare objects using 'taller and 'shorter'

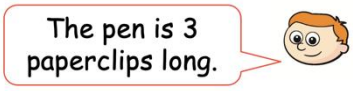
1. Concrete objects
   Flowers
   People
   Cubes etc

2. Images

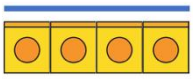
- I can measure using objects

Highlight they have to be the same size

1. Everyday items:
   Paperclips
   Hands etc



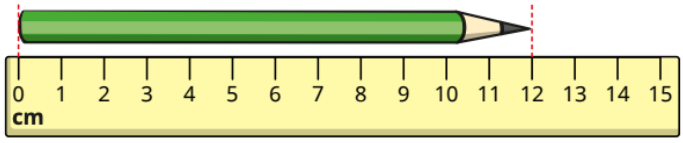
2. Mathematical objects:
   Counting bears
   Cubes etc



The line is 4 cubes long.

- I can measure using centimetres

1. Images



2. Using a ruler

Year Two:

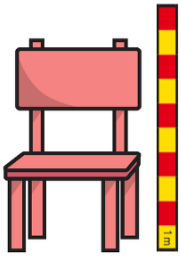
- I understand the terms 'long' and 'short'
- I can compare objects using 'long' and 'short'
- I can compare objects using 'taller and 'shorter'
- I can measure using objects

- I can measure using centimetres
- I can measure accurately using a ruler (centimetres)
- I can use a ruler to accurately draw a given length (centimetres)
- I understand that metres are larger than centimetres
- I can estimate length and heights using metres

1. Using a metre stick

Do you think a chair is taller or shorter than 1 m?

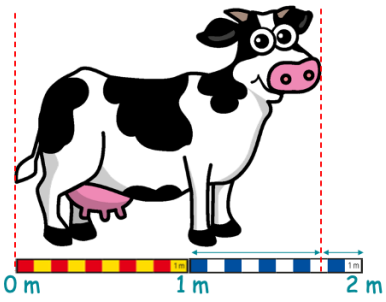
shorter



2. Images

What is the length of the cow to the nearest metre?

2 m



- I can compare lengths and heights

1. Using objects and comparing their lengths
2. Using objects and comparing their lengths using a ruler to measure
3. Using images and rulers

4. Using measurements (5cm, 9cm, 3cm etc)

- I can order lengths and heights

1. Using objects and comparing their lengths/heights
2. Using objects and comparing their lengths/heights using a ruler
3. Using images and rulers
4. Using measurements (5cm, 9cm, 3cm etc)

- I can apply the four operations to length and height

Year Three and Year Four (Both to be taught in Year Three):

- I can measure accurately using a ruler (centimetres)
- I can use a ruler to accurately draw a given length (centimetres)

- I understand that metres are larger than centimetres
- I can estimate length and heights using metres
- I can understand the relationship between metres and centimetres

1m = 100cm

- I can write lengths and heights as metres and centimetres

Eg) 1m 40cm

- I can convert between metres and centimetres (multiples of 100)

Including decimals

m → cm ***____ m x 100 = ____ cm***
cm → m ***____ cm ÷ 100 = ____ m***

needs to be covered during Year Four recap as x/÷ 100 will have been taught

- I understand that millimetres are smaller than centimetres
- I can measure accurately using a ruler (millimetres)
- I can use a ruler to accurately draw a given length (millimetres)
- I can understand the relationship between millimetres and centimetres

1cm = 10mm

- I can write lengths and heights as millimetres and centimetres

Eg) 1cm 3mm

- I can convert between millimetres and centimetres

Cm → mm _____ cm x 10 = _____ mm
Mm → cm _____ mm ÷ 10 = _____ cm

Including decimals

m → cm _____ m x 100 = _____ cm
cm → m _____ cm ÷ 100 = _____ m

needs to be covered during Year Four recap as x/÷ 10 will have been taught

- I can compare lengths and heights
- I can compare lengths and heights using the same units of measure
- I can compare lengths and heights using different units of measure

Children should know that mm is less than cm and m etc

A beetle is 6 mm long.
A worm is 4 cm long.
Which animal is longer?

- I can apply the four operations to length and height
- I can add lengths using the same units of measure
- I can add lengths using different units of measure

- I can subtract lengths using the same units of measure

- I can subtract lengths using different units of measure

- I understand that kilometres are larger than metres – **may need to be taught in Y4 as chn will not have been introduced to thousands yet**

- I can understand the relationship between kilometres and metres– **may need to be taught in Y4 as chn will not have been introduced to thousands yet**

1km = 1000m

- I can convert between kilometres and metres - **may need to be taught in Y4 as chn will not have been introduced to thousands yet**

Including decimals

km → m ***____ km x 1000 = ____ cm***
m → km ***____ m ÷ 1000 = ____ m***

needs to be covered during Year Four recap as x/÷ 1000 will have been taught

- I can compare lengths using kilometres
- I can add and subtract using kilometres

- I can apply the four operations to length and height (range of units)

Year Five and Year Six (Both to be taught in Year Five):

- I can understand the relationship between metres and centimetres
- I can write lengths and heights as metres and centimetres
- I can convert between metres and centimetres
- I understand that millimetres are smaller than centimetres
- I can measure accurately using a ruler (millimetres)
- I can use a ruler to accurately draw a given length (millimetres)
- I can understand the relationship between millimetres and centimetres
- I can write lengths and heights as millimetres and centimetres
- I can convert between millimetres and centimetres
- I can compare lengths and heights using the same units of measure
- I can compare lengths and heights using different units of measure
- I understand that kilometres are larger than metres
- I can understand the relationship between kilometres and metres

- I can convert between kilometres and metres
- I can compare lengths using kilometres
- I can add and subtract using kilometres
- I can apply the four operations to length and height (range of units)

- I can convert between different units of measure
  kilometre and metre; centimetre and metre; centimetre and millimetre

- I can convert between miles and kilometres

5 miles is approximately 8 kilometres

To convert from miles to kilometres, you first multiply by 8 then divide by 5.

$$\text{miles} \rightarrow \times 8 \rightarrow \div 5 \rightarrow \text{kilometres}$$

To convert from kilometres to miles, do the opposite – multiply by 5 then divide by 8.

$$\text{kilometres} \rightarrow \times 5 \rightarrow \div 8 \rightarrow \text{miles}$$

- I can use all four operations to solve problems including length