Four Operations with Lengths

Adult Guidance with Question Prompts

Children apply their knowledge of addition, subtraction, multiplication and division to investigate challenges relating to length and height. They spot the key words to guide them as they they consider which operation to use. Children use images and practical apparatus to support their learning.

The use of bar models are recommended as a strategy to investigate the challenges on this page.

Can you spot the useful information?

What do you need to do to find the answer?

Can you draw a bar model to help you work out what to do?

How far has A climbed?

What are the key words?

What can you do to find the answer?

Can you use a bar model to help?

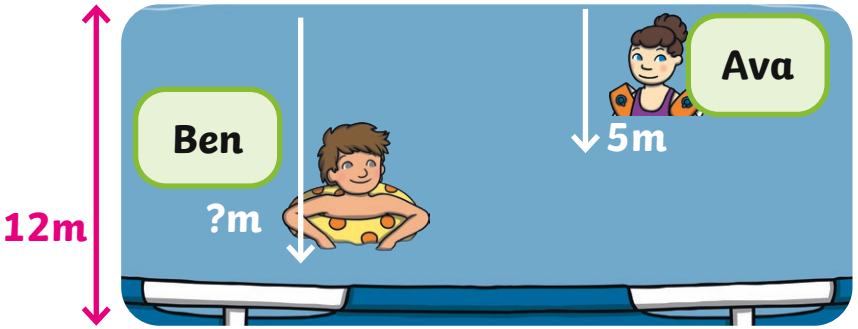
How far has C climbed?

How much higher is C than B?

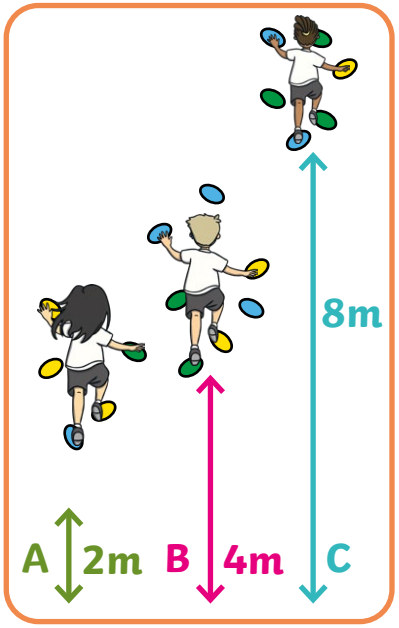
How far have they climbed altogether?

Four Operations with Lengths

Ben has swum twice as far as Ava.
How far has he swum?



How far does each child have to swim to reach the end of the pool?



How many metres will A climb to catch up with C?

How many metres have they climbed altogether?

Can you write your own question?

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Children apply their knowledge of addition, subtraction, multiplication and division to investigate challenges relating to length and height. They spot the key words to guide them as they they consider which operations to use. Children use images and practical apparatus to support their learning.
For the investigations on this page, children will draw from their knowledge of multiplication to calculate the distance achieved by the runners. They will also choose their preferred addition and subtraction strategies to discover who has won the game of marbles by stopping closest to the marker.

What information is important?
What number patterns/facts do we know that will help us?
What is two less/more than 70?
What is five less/more than 70?
How far would each girl have run if there were a 10 metre difference between them?
What is ten less/more than 70?

How far did the orange marble roll?
How can you work out how far the red marble went? Which key words can help?

How can we work out how far the purple marble rolled?
Which key words can help?

Which number is closest to 50cm?
How do you know? Convince me.

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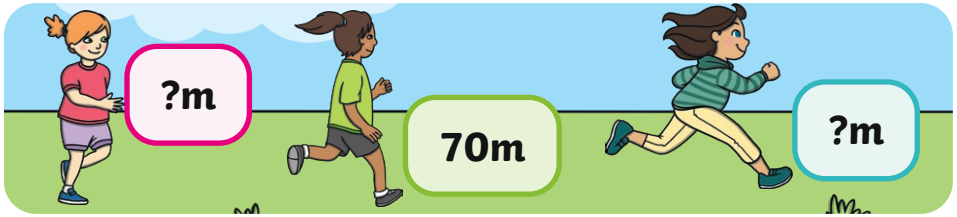

How far would each girl have run if they were all 2 metres apart?

What about if they were all 5 metres apart?

I rolled my orange marble 65 centimetres.

My red marble rolled 4cm less than the orange.

My purple marble rolled 12cm more than the orange.

How many centimetres did each marble roll?

Which marble rolled the closest to 50cm?

Can you prove it?

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Adult Guidance with Question Prompts

Children apply their knowledge of addition, subtraction, multiplication and division to investigate challenges relating to length and height. They spot the key words to guide them as they they consider which operations to use. Children use images and practical apparatus to support their learning.
For the investigations on this page, children will answer questions about height and length by applying their knowledge of multiplication and division.

Can you spot the useful information?
What is the height of Kris's jump?
What height is 20cm twice as high as?
What can you do to find the answer?

Have you found the key words?
What is the height of Mia's jump?
How can you find three lots of ten?

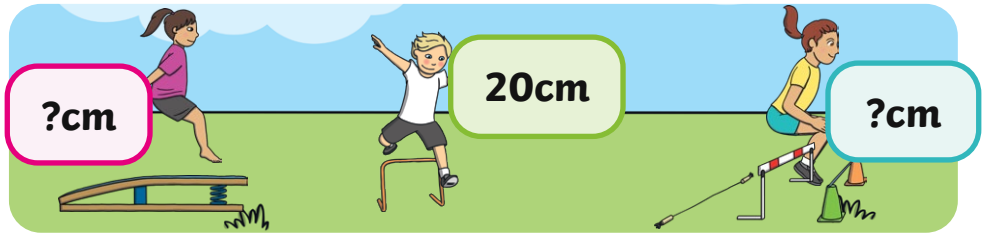
What would this look like as a number sentence?
What can you do to find the answer?

How many skipping ropes could be made from 10m of rope?
How could you work this out?

What if you had 12m?

What pattern can you see?
Can you use this to find more possibilities?

Four Operations with Lengths



Mia **Kris** **Beth**

Kris jumped twice as high as Mia. How high did Mia jump?

Beth jumped 3 times higher than Mia. How high did Beth jump?

My skipping rope is 2m long. How many metres of rope would make 10 skipping ropes?

How many skipping ropes can I make from 10 metres of rope?

What about 12 metres?