Discussion Problems
Step 2: Equivalent Lengths – m and cm

National Curriculum Objectives:

Mathematics Year 3: (3M1a) Compare lengths (m/cm/mm)
Mathematics Year 3: (3M2a) Measure lengths (m/cm/mm)

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 3 Length and Perimeter resources.

Did you like this resource? Don't forget to review it on our website.

Equivalent Lengths – m and cm

1. The children below discussing different lengths. They are trying to work out which of their lengths are equal and can be paired together.

John: My length is $\frac{1}{2}$ of 1m.

Mark: My length is one metre and five centimetres.

Simon: My length is < 1m and is a multiple of 5.

Alice: My length is $\frac{3}{4}$ of one metre.

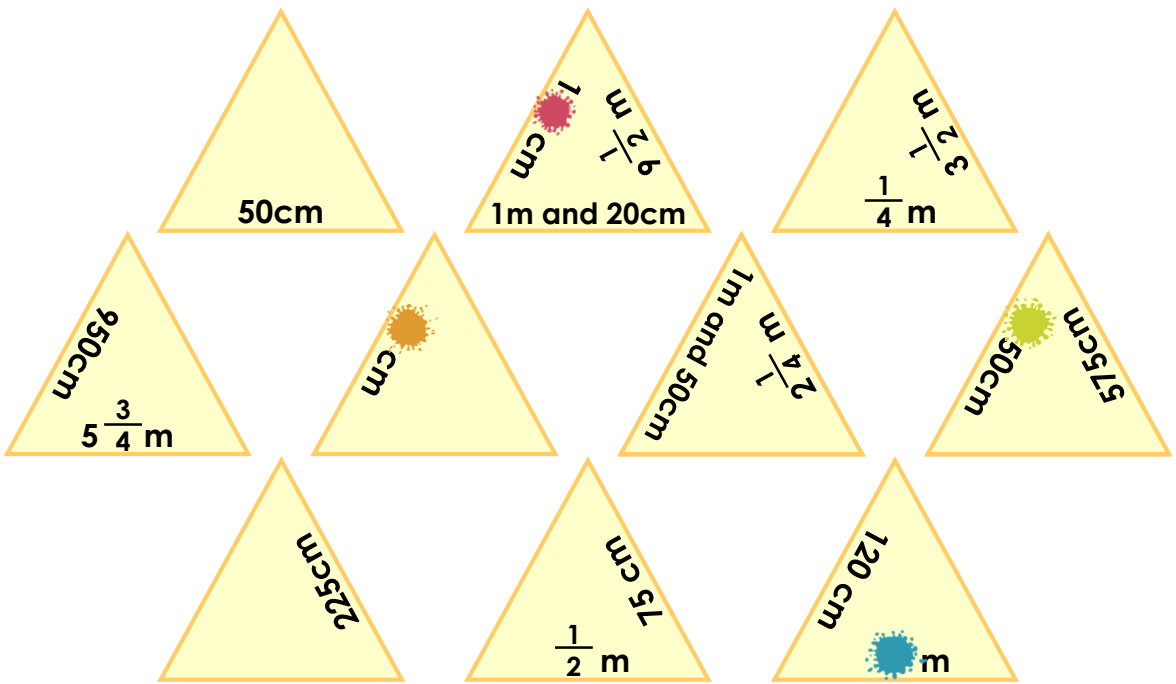
Meera: My length is between 40cm and 80cm.

Taylor: My length is > 100cm. It has a digit sum of 6 and 0 as a place holder.

Use the clues to investigate which children could be paired together.

DP

2. Arrange the triangles below so that touching sides show equivalent lengths. Be careful – some numbers are missing and need to be filled in!



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Equivalent Lengths – m and cm

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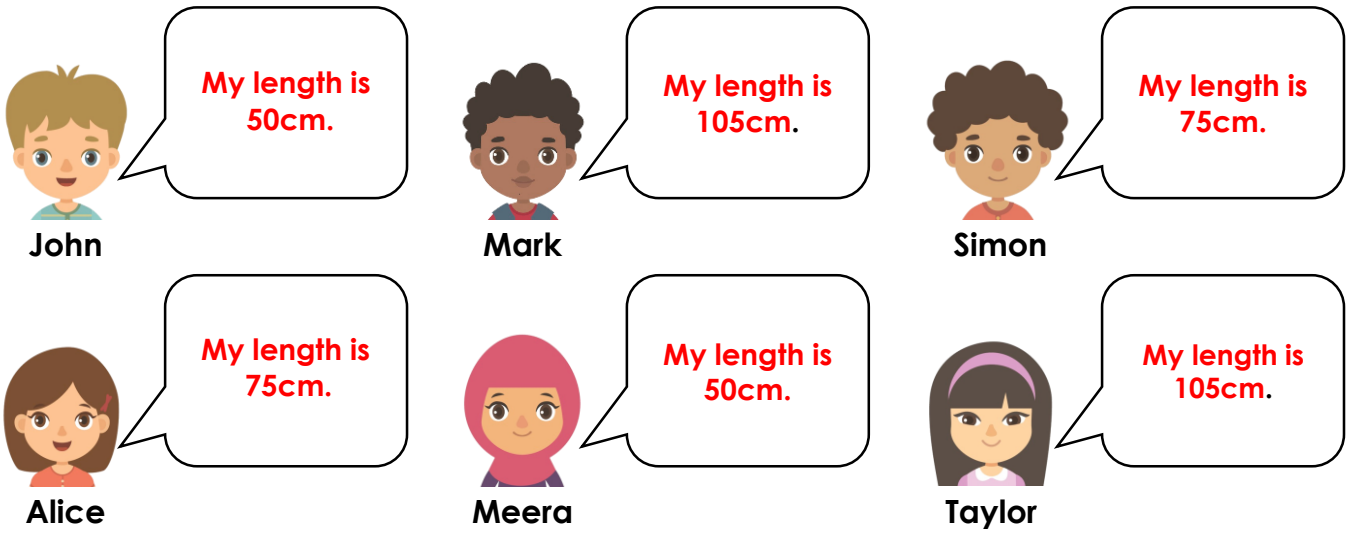


Use the clues to investigate which children could be paired together.

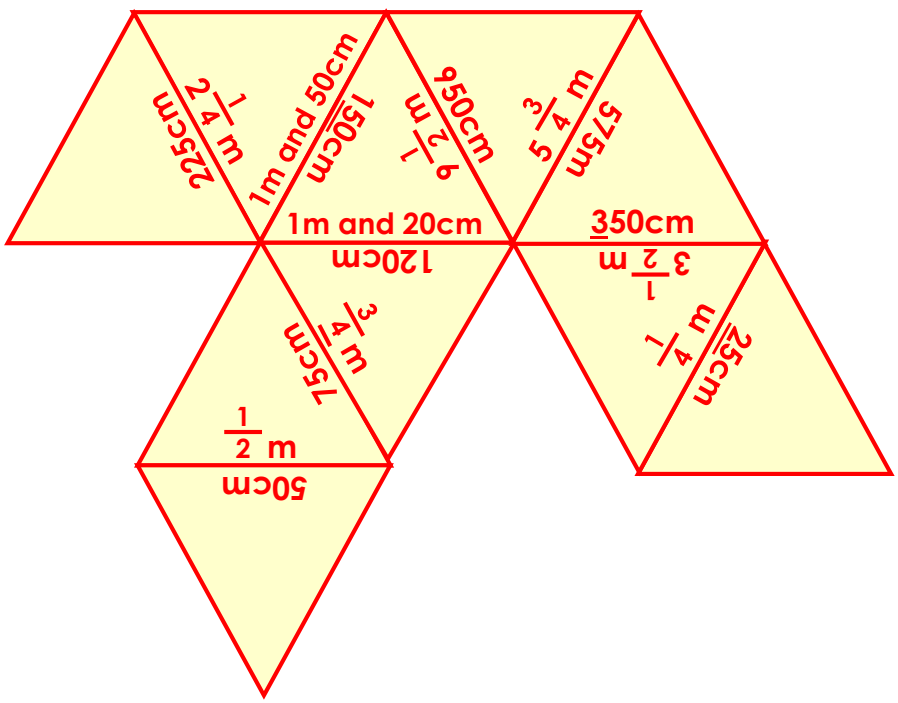
Possible answers: Shown above → Mark and Taylor (105cm); Simon and Alice (75cm); John and Meera (50cm)

OR

Mark and Taylor (105cm); Alice and Meera (75cm); John and Simon (50cm)

DP

2. Arrange the triangles below so that touching sides show equivalent lengths. Be careful – some numbers are missing and need to be filled in!



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