Discussion Problems
Step 3: Complements to 1

National Curriculum Objectives:

Mathematics Year 5: (5F10) Solve problems involving number up to 3dp.
Mathematics Year 5: (5M9a) Use all four operations to solve problems involving measure [for example, length, mass, volume, money] using decimal notation, including scaling.

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 5 Decimals resources.

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

Complements to 1

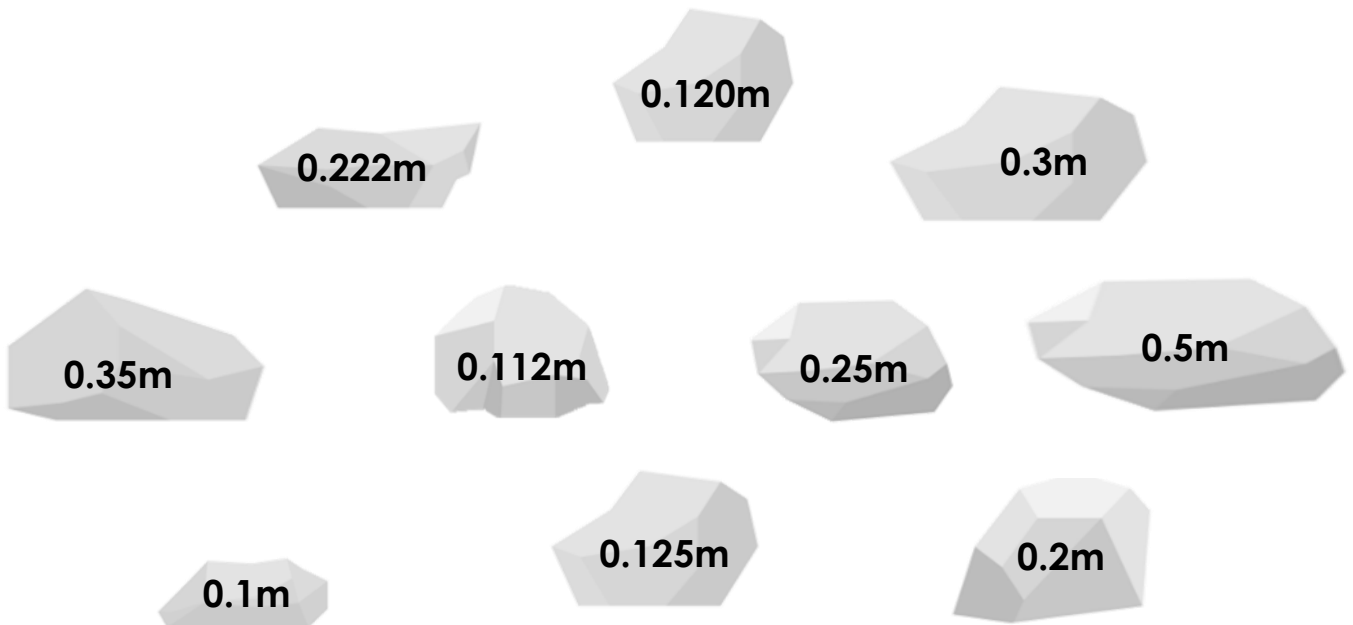**1. Work out the value of the shapes below. Write each answer to 3dp.**

▲ + ★ + ▲ = 1

★ + ▲ + ⬠ + ⬠ = 1

▲ + ▲ + ▲ + ▲ = 1

What decimals could the shapes below represent? How many answers can you find?

● + ⬡ + ⬡ + ⬡ + ⬡ + ● = 1

DP

2. Use a combination of the rocks below to build a dry stone wall which measures exactly 1m long. You may use each rock more than once.

0.120m

0.222m

0.3m

0.35m

0.112m

0.25m

0.5m

0.125m

0.2m

0.1m

How many different combinations can you find?

DP

Complements to 1

1. Work out the value of the shapes below. Write each answer to 3dp.

▲ **=** **0.250**

★ **=** **0.500**

⬟ **=** **0.125**

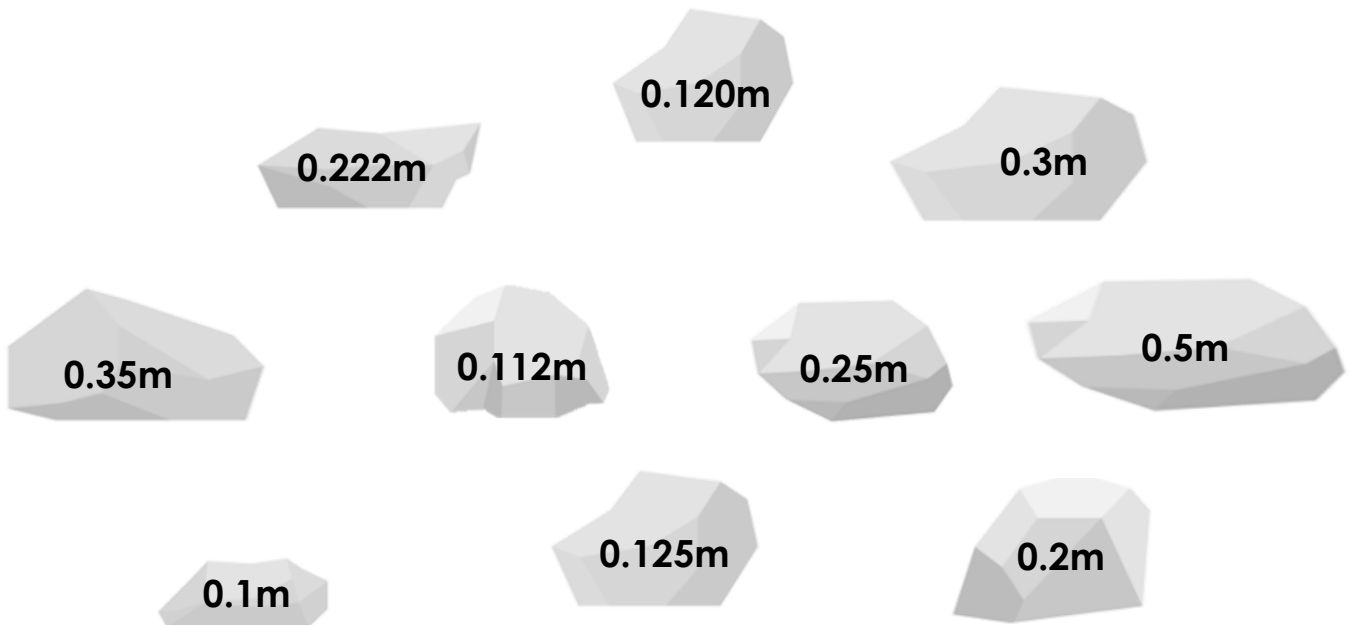**What decimals could the shapes below represent? How many answers can you find?**

Various possible answers, for example:

⬤ **= 0.3**   ⬢ **= 0.1**

2. Use a combination of the rocks below to build a dry stone wall which measures exactly 1m long. You may use each rock more than once.

0.120m

0.222m

0.3m

0.35m

0.112m

0.25m

0.5m

0.125m

0.2m

0.1m

How many different combinations can you find?

Various possible answers, for example:
0.222m + 0.222m + 0.222m + 0.222m + 0.112m = 1m

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Discussion Problems – Complements to 1 **ANSWERS**