Discussion Problems
Step 1: Make a Whole

National Curriculum Objectives:

Mathematics Year 4: (4F6b) Recognise and write decimal equivalents of any number of tenths or hundredths

Mathematics Year 4: (4F10b) Solve simple measure and money problems involving fractions and decimals to two decimal places

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 4 Decimals resources.

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

Make a Whole

1. How many ways can you fill the calculation tree?

$$\square + \square = 1$$

$$\square + \square + \square = 1$$

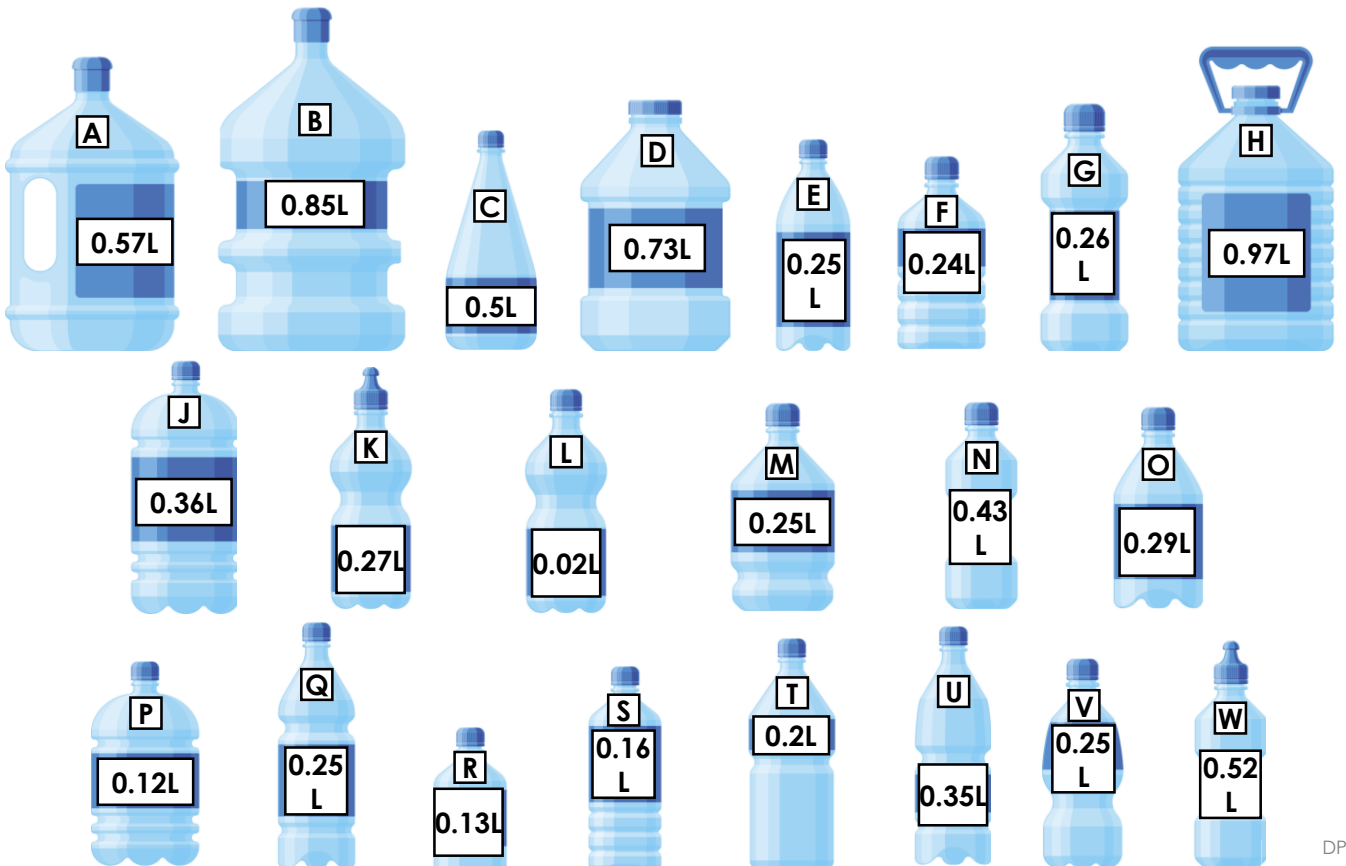$$\square + \square + \square + \square = 1$$

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2. Which bottle is the odd one out?

A 0.57L

B 0.85L

C 0.5L

D 0.73L

E 0.25L

F 0.24L

G 0.26L

H 0.97L

J 0.36L

K 0.27L

L 0.02L

M 0.25L

N 0.43L

O 0.29L

P 0.12L

Q 0.25L

R 0.13L

S 0.16L

T 0.2L

U 0.35L

V 0.25L

W 0.52L

DP

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Discussion Problems – Make a Whole – Year 4

Make a Whole

1. How many ways can you fill the calculation tree?

Various answers, for example:

0.8 + 0.2 = 1

0.14 + 0.51 + 0.35 = 1

0.26 + 0.15 + 0.39 + 0.2 = 1

0.2 + 0.2 + 0.2 + 0.2 + 0.2 = 1

0.38 + 0.07 + 0.02 + 0.11 + 0.03 + 0.39 = 1

0.06 + 0.12 + 0.07 + 0.4 + 0.01 + 0.31 + 0.03 = 1

DP

2. Which bottle is the odd one out?

H is the odd one out because all the other amounts can be combined to make a whole litre, for example:

A and N (0.57L and 0.43L)

B, L and R (0.85L, 0.02L and 0.13L)

C, F and G (0.5L, 0.24L and 0.26L)

D and K (0.73L and 0.27L)

E , M, Q and V (0.25L, 0.25L, 0.25L and 0.25L)

J, P and W (0.36L, 0.12L and 0.52L)

O, S, T and U (0.29L, 0.16L, 0.2L and 0.35L)

DP