Discussion Problems
Step 6: Forming Equations

Teaching note:

Concrete manipulatives may be useful for this resource.

National Curriculum Objectives:

Mathematics Year 6: (6A1) Express missing number problems algebraically

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 6 Algebra resources.

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

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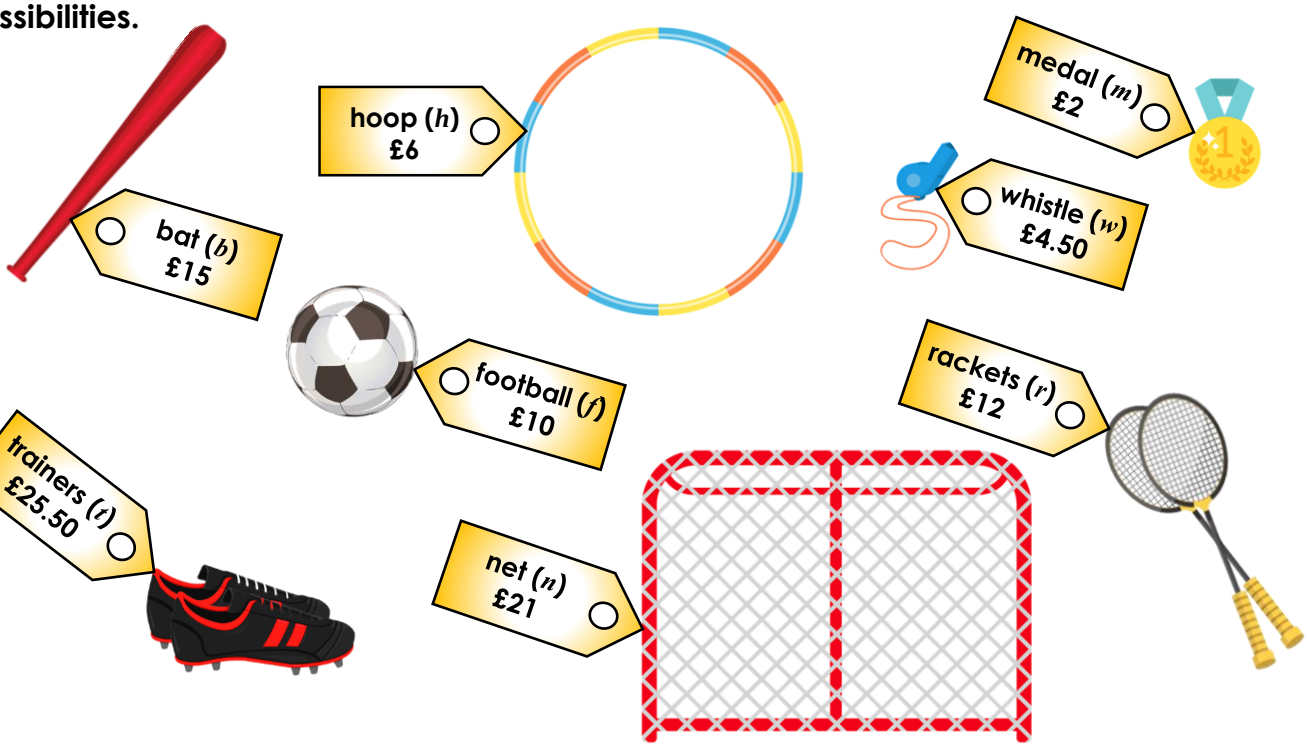
Forming Equations

1. n is worth 4. Organise the cards to form an equation so that it equals 16. You can use each card a maximum of twice. Explore different possibilities.

n	3.5	$\frac{1}{2}$	$\frac{1}{4}$	2
16	9	4	5	8
+	−	x	÷	=

DP

2. Terry has gone into a sports shop. He has £30 to spend. Investigate the different combinations of things he could buy and write the equation for each. Find 5 possibilities.



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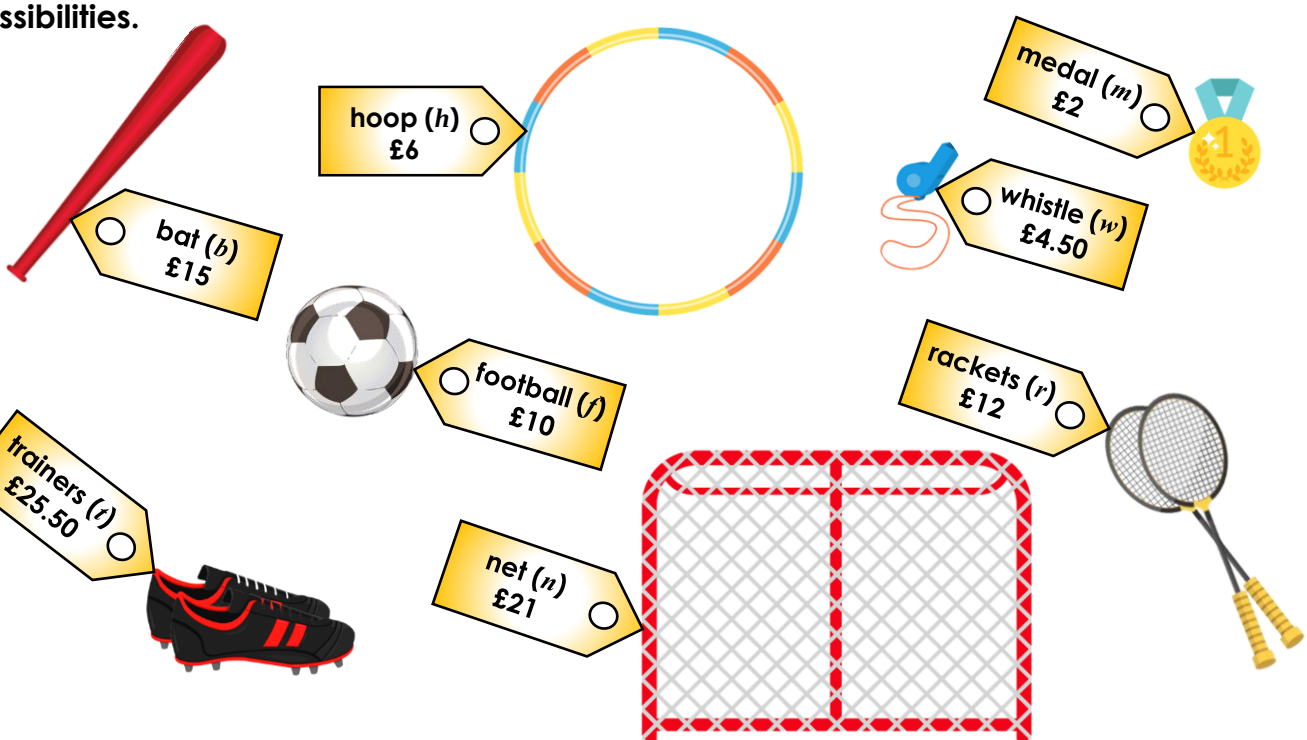
n	3.5	$\frac{1}{2}$	$\frac{1}{4}$	2
16	9	4	5	8
+	−	x	÷	=

Various answers, for example:

$4n = 16$, $8n \div 2 = 16$, $0.5n \times 8 = 16$, $\frac{1}{4}n \times 16 = 16$, $3.5n + 2 = 16$

DP

2. Terry has gone into a sports shop. He has £30 to spend. Investigate the different combinations of things he could buy and write the equation for each. Find 5 possibilities.



Various answers, for example:

$2b = £30$, $2w + n = £30$, $3h + r = £30$, $t + w = £30$, $3f = £30$

DP

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