Discussion Problems
Step 2: Round to the Nearest 10

National Curriculum Objectives:

Mathematics Year 4: (4N4b) Round any number to the nearest 10, 100 or 1,000

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.

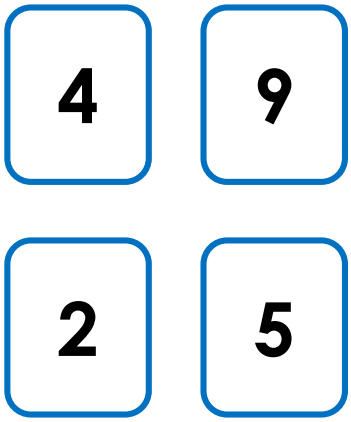
We recommend self or peer marking using the answer page provided to promote discussion and self-correction.

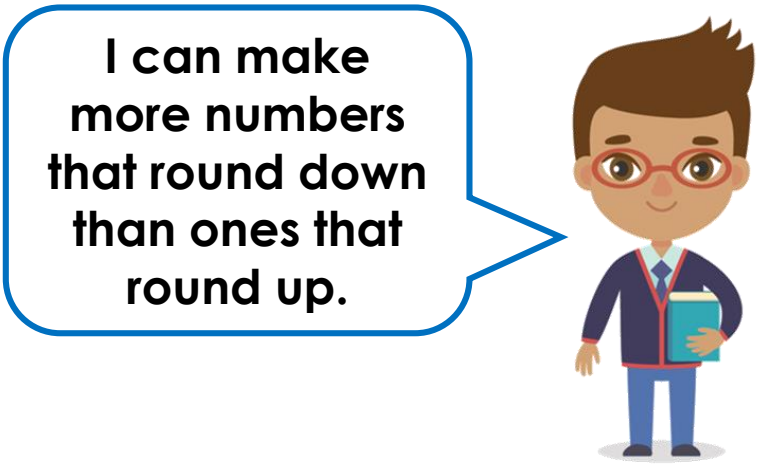
More Year 4 Place Value resources.

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

Round to the Nearest 10

1. Hogarth is creating some 3-digit numbers using the number cards below.





Investigate whether his statement is correct or not by creating as many 3-digit numbers as possible.

DP

2. George is rounding 3 numbers to the nearest 10 and then adding them together so that they total a target of 900. He has been challenged to find the smallest difference between the actual total and his target.

He has come up with one solution below:

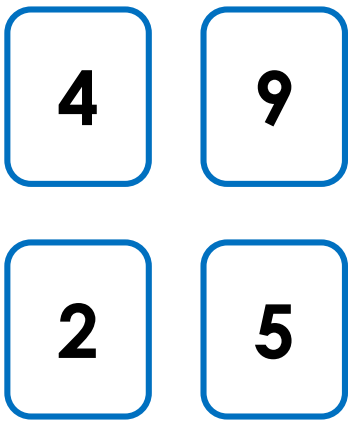
354 + 279 + 274 = 907
(Rounded to the nearest 10)
350 + 280 + 270 = 900
(907 – 900 = 7)
His difference is 7.

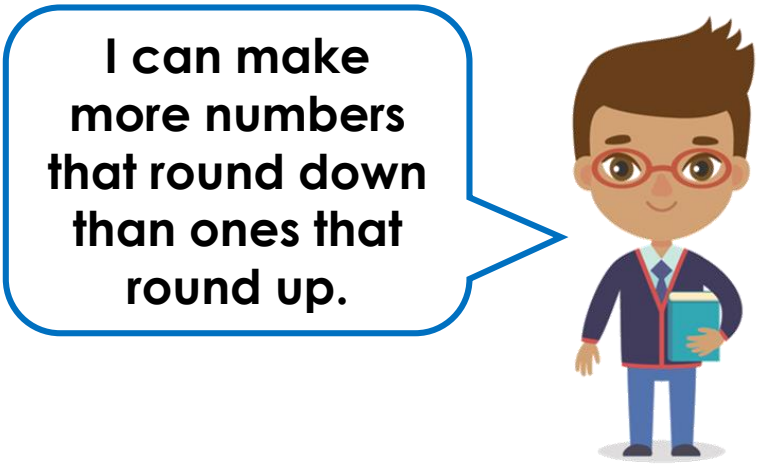
His best friend Cailam says he can make an even smaller difference. Investigate whether he is correct.

DP

Round to the Nearest 10

1. Hogarth is creating some 3-digit numbers using the number cards below.





Investigate whether his statement is correct or not by creating as many 3-digit numbers as possible.

Hogarth is not correct. There are 24 possible 3-digit numbers; 12 would round up and 12 would round down (provided that the digits are not duplicated in any 3-digit number).

DP

2. George is rounding 3 numbers to the nearest 10 and then adding them together so that they total a target of 900. He has been challenged to find the smallest difference between the actual total and his target.

He has come up with one solution below:

354 + 279 + 274 = 907
(Rounded to the nearest 10)
350 + 280 + 270 = 900
(907 – 900 = 7)
His difference is 7.

His best friend Cailam says he can make an even smaller difference. Investigate whether he is correct.

Yes, he is correct:
Various answers, for example; 469 + 151 + 278 = 898; 900 – 898 = 2

DP