

# **Maths** Addition, Subtraction, Multiplication and Division



Maths I Year 6 I Addition, Subtraction, Multiplication and Division I Mental Calculations Lesson 5 of 6: Calcu-late!

# Calcu-late!



#### Aim

I can perform mental calculations with mixed operations.

#### Success Criteria

- I can partition a variety of numbers.
- I can add or subtract the nearest multiple of 10 or 100 then adjust.
- I can identify near doubles.
- I can use repeated doubling or halving.
- I can solve problems using known number facts.



# Pyramid Puzzle

Get into pairs.





Some calculations we can do in our head mentally. We can write notes to help us remember key numbers while working out the answer.





Which strategy will be most useful when completing this calculation?

457.46 + 124.25 = 581.71

345 4 1045

To make this easier to work out, we can use the method partitioning.

This involves partitioning into hundreds, tens, ones, tenths and hundredths, adding the hundreds first. So add the hundreds first 457.46 + 100 = 557.46 Then add the tens. 557.46 + 20 = 577.46 Add the ones. 577.46 + 4 = 581.46 Add the tenths. 581.46 + 0.2 = 581.66 Lastly, add the hundredths. 581.66 + 0.05 = 581.71 The answer is 581.71.









Which strategy will be most useful when completing this calculation?

1459 + 294 = 1753

345 4 1055

To make this easier to work out, we can use a method called compensation.

This involves adding to the nearest multiple of ten or 100 then adjusting. The nearest multiple of ten to 294 is 300. This is six more than 294. 1459 + 300 = 1759 We then need to adjust our answer to make up for the six that we added to get to 300. Therefore we subtract six to our answer. 1759 - 6 = 1753









Which strategy will be most useful when completing this calculation?

164.5 + 170.1 = 334.6

345 4 1057

To make this easier to work out, we can use the method near doubles.

This involves doubling, then adjusting. Double 164.5

164.5 + 164.5 = 329

We then need to adjust, as we needed to add 170.1 not 164.5. Therefore we add 5.6 onto our answer.

329 + 5.6 = 334.6





















#### Calcu-late!



In pairs, can you match the number calculation with its corresponding answer before the timer runs out and you are too late?





#### **Game Time!**



You will be playing a board game in pairs.





# Being the Teacher



Imagine you are the teacher.





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