Maths Mastery
Number and Place Value Challenge Cards

twinkl

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1. Which number is the odd one out?

Explain your reasons.

53   124   230
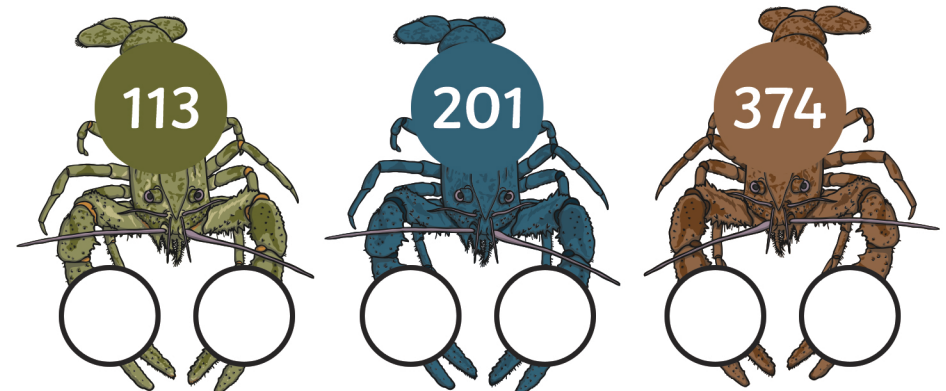
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2. I'm thinking of a number.
   I double it.
   I subtract 10.
   I add 2.
   My answer is 2 x 20.
   What number was I thinking of?

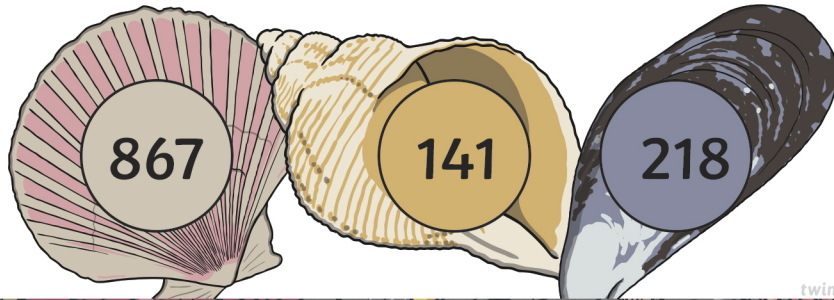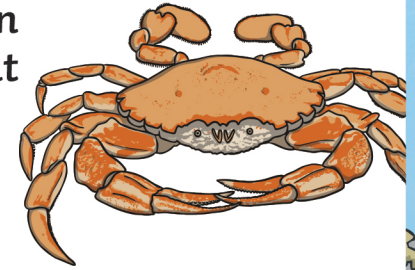3. Make the number in the middle of each lobster by adding two different numbers.

113   201   374

4. 523 has 5 hundreds, 2 tens and 3 ones
523 also has 52 tens and 3 ones
523 could also be described as 5 hundreds and 23 ones.
How many different ways can you describe the numbers on the seashells?

867 **141** **218**

5. Colin the Crab has been pinching numbers. What should be in the gaps?

$$23 \times \square = 161$$

$$142 \times \square = 852$$

$$4\square \times \square = 336$$

6. The Turtle says that $\frac{8}{10} - \frac{4}{10} = \frac{3}{10}$
Is he correct? Tell him how you know.

He also says that $\frac{5}{8} + \frac{4}{8} = 1\frac{2}{8}$
Is he correct? Explain your reasons.

7. Choose 4 numbers to go at the bottom. Zero is not allowed. Add each adjacent pair and put the number in the circle above. Then add those two numbers and write the answer above. Can you make sure the last 2 numbers add to total 15?

15
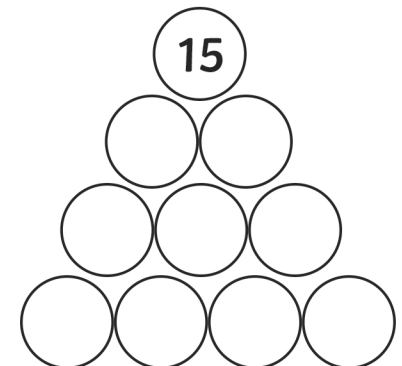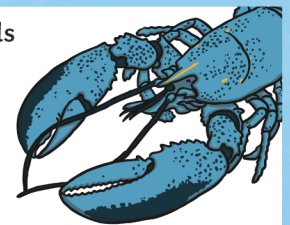
8. The coral is asking whether these statements are true or false. You have to decide and explain how you know.

   If I start counting from 2, in steps of ten, I shall only say even numbers. True or false?

   If I start counting backwards in fours from the number 93, I shall say the number 43. True or false?

Number and Place Value Challenge Cards

1. 230 only multiple of ten, only number over 200, only number with zero in ones column; 53 only 2-digit number, only odd number; 124 has an even tens digit, only multiple of 4.
   Other explanations may also be correct.

2. It may help you to work backwards through the problem. Start with 2 x 20, subtract 2, add 10 and then, halve 48. The answer is 24.

3. 113: 100 + 13, 103 + 10, 50 + 63, 60 + 53, 30 + 83 or lots of other possibilities. 201: 200 + 1, 100 + 101, 50 + 151, 120 + 81, 150 + 51 or lots of other possibilities. 374: 300 + 74, 360 + 14, 200 + 174, 100 + 274, 370 + 4 or lots of other possibilities

4. 867: 8 hundreds, 6 tens and 7 ones; 86 tens and 7 ones; 8 hundreds and 67 ones.
   141: 1 hundred, 4 tens and 1 one; 14 tens and 1 one; 1 hundred and 41 ones.
   218: 2 hundreds, 1 ten and 8 ones; 21 tens and 8 ones; 2 hundreds and 18 ones.

5.
$$
\begin{array}{r} 23 \\ \times\ \ 7 \\ \hline 161 \end{array}
\qquad
\begin{array}{r} 142 \\ \times\ \ 6 \\ \hline 852 \end{array}
\qquad
\begin{array}{r} 42 \\ \times\ \ 8 \\ \hline 336 \end{array}
$$

6. incorrect because $\frac{8}{10} - \frac{4}{10} = \frac{4}{10}$ and $\frac{5}{8} + \frac{4}{8} = \frac{9}{8} = 1\frac{1}{8}$

7. Start at the top and find two numbers which add together to make 15. Then those two numbers should be split into addition pairs, and so on. The final numbers (on the bottom row) will include at least one 1.

8. True; you will only ever say even numbers. False; you won't say 43. You will say 45 and 41.