## Maths Mastery

 Negative Numbers Challenge Cards1. Work with a partner. Challenge your partner by asking them to count by giving:

## Starting number

 Step Directione.g. Count in 5s, from 12, backwards:

$$
12,7,2,-3,-8,-13
$$

A good challenge is one where your partner gets most correct, but may need to really think.

## Negative Numbers

Maths Mastery Challenge Cards
2. Giving reasons, explain whether the following are true or false:

Nineteen less than eleven is minus eight.

$$
-39+23=-62
$$

27 more than -18 is -45 .

The temperature is $-5^{\circ} \mathrm{C}$ outside and $23^{\circ} \mathrm{C}$ inside. The difference is $18^{\circ} \mathrm{C}$.
3. Write an explanation, using visual models if needed, showing how to calculate the answers to
 these problems:

$$
\begin{aligned}
& 12-21= \\
& -8+23=
\end{aligned}
$$

Compare your explanation with a partner. Can you make any improvements?

## Negative Numbers - Answers

1. No answers - will vary depending on numbers given by child
2. 

True.
False - the answer is -16 . The answer gets closer to 0 , so +20 to -19 , and +3 more to -16 .
False - the answer is 9 . The answer goes through 0 , so +18 to 0 , and +9 more to 9 .
False - the answer is 280 C . The answer goes through 0 , so -5 to 0 is 5 , and 0 to 23 is $23.5+23=28$.
3.

-21 can be split into -12 to 0 and -9 beyond 0 to -9 .

+23 can be split into +8 to 0 and +15 beyond 0 to 15

