## Oral and mental starters

## Number and place value

## ] Spot the pattern

Challenge the children to spot and continue number patterns.
For example: $75,100,125, \ldots$ What comes next?

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45,60,75, \ldots
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440,420,400, \ldots
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Once the pattern has been spotted, let the children continue each sequence by 'passing it on' around the room.

## 2 Place value elimination game

Write a five-digit number (such as 65,213 ) on a piece of paper and hide it from the children. Write the digits of your number on the board in a random order. Tell the children to ask questions to which the answer may be Yes or No, higher or No, lower.
For example: Is the 5 digit in the tens column? (No, higher.)
Explain that they have 20 questions to work out the position and place value of each digit.

## 3 Number consequences

Choose a two-digit number. Ask children to write it on their whiteboards and apply a set of instructions, some of which change the place value. They write down the new number each time.

For example: 45, ten times bigger, add 100 , multiply by 10 , add 6 , divide by 10 and the answer is ... Repeat with other numbers and other instructions.

## Addition and subtraction

## $4_{3}$ Double it and pass it on

Put the children into groups of five or six. Ask one person in each group to choose a single-digit number. They say the number out loud, double it and 'pass it on', this is repeated around the group until it bridges 100 and that person is given a point and begins with a new number. The person with the most points at the end wins. This game can be extended so that the numbers must reach 1000 or even 10,000 in order to gain a point.

## 5 Pairs to make $1000 / 10,000$

Remind the children that they have been learning number bonds since they started school, for example, number bonds to $10(3+7 ; 5+5)$ and number bonds to $100(30+70 ; 50+50)$. Explain that today they are going to extend this by practising number bonds to 1000 and including number bonds to 10 and 100 .
For example: What is the pair to make 1000 for 455 ? (545)
What about for 629? (37I)
Use 'Place value arrow cards' from the CD-ROM to generate numbers or simply write a list of numbers. The children find the pairs to make 1000 and write them on individual whiteboards to show you.
Extend this by practising number bonds to 10,000 .
For example: What is the pair to make I0,000 for 8275 ? (I725)

