

## Always, sometimes or never true

Print out a copy of the card set on the next page. Cut out the cards.

Find someone to work with – perhaps a colleague or friend. They don't need to be a maths or numeracy teacher.

In your pair:

- choose a card
- work together to decide whether the statement is always, sometimes or never true and justify your reasoning:
  - If you consider a statement to be **always** true, explain how you know this.
  - If you think a statement is **sometimes** true, describe the cases when it is true and all the cases where it is false.

If you think a statement is **never** true, explain how you know this.

<p><b>Digits</b> Numbers with more digits are greater in value.</p>	<p><b>Add a nought</b> To multiply by ten, you just add nought on the right hand end of the number.</p>
<p><b>Pay rise</b> Max gets a pay rise of 30%. Jim gets a pay rise of 25%. So Max gets the bigger pay rise.</p>	<p><b>Sale</b> In a sale, every price was reduced by 25%. After the sale every price was increased by 25%. So prices went back to where they started.</p>
<p><b>Area and perimeter</b> When you cut a piece off a shape you reduce its area and perimeter.</p>	<p><b>Right angles</b> A pentagon has fewer right angles than a rectangle.</p>
<p><b>Birthdays</b> In a group of ten learners, the probability of two learners being born on the same day of the week is one.</p>	<p><b>Lottery</b> In a lottery, the six numbers 3, 12, 26, 37, 44, 45 are more likely to come up than the six numbers 1, 2, 3, 4, 5, 6.</p>
<p><b>Bigger fractions</b> If you add the same number to the top and bottom of a fraction, the fraction gets bigger in value.</p>	<p><b>Smaller fractions</b> If you divide the top and bottom of a fraction by the same number, the fraction gets smaller in value.</p>
<p><b>Square roots</b> The square root of a number is less than or equal to the number.</p>	<p><b>Consecutive numbers</b> If you add <math>n</math> consecutive numbers together, the result is divisible by <math>n</math>.</p>