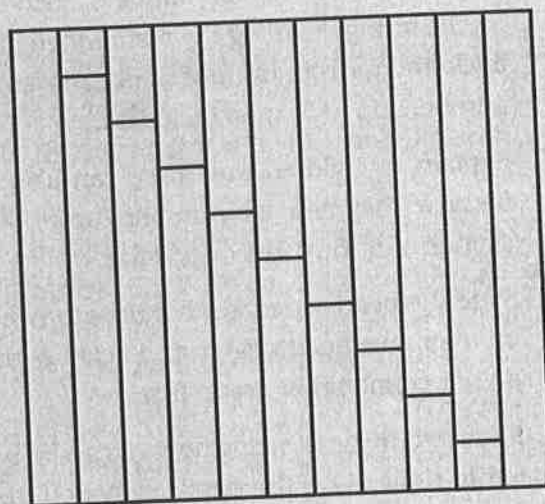
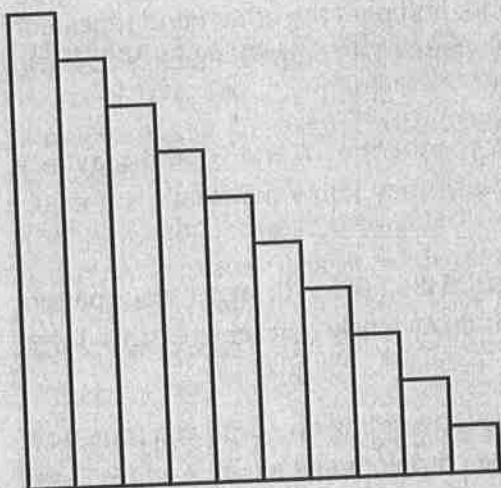




Activity

Find complements of 10 with Cuisenaire rods

Have the pupils build a staircase, from 10 down to 1, with Cuisenaire rods. Now get them to transform the staircase into a wall, by adding 'the complement' to the top of each rod, i.e. making each column add up to 10. It can be a moment of revelation for some children, when they discover that in the process of following these instructions they are actually building another staircase, upside down.



Use the wall to talk about complements to 10, to read equations, to pose addition and subtraction questions, and to write number problems, including missing-number problems, just as you did for the component work detailed earlier in this section. The only difference here is that the paired components of 10 are so important for the pupils to know that these five or six facts need more attention, and more time spent on exploring and learning them, than other number bonds.

The five (or six) complement facts are: $(0 + 10)$

$$1 + 9$$

$$2 + 8$$

$$3 + 7$$

$$4 + 6$$

$$5 + 5$$

Game

Complements Number Search

This is a solitaire activity, or can be turned into a competitive game by seeing which member of the group can find the most complement pairs in a limited time period.

Number searches are very easy to make. They are just as easy, and instructive, for pupils to make for each other.

Teaching points:

- Complements to 10 (i.e. the pairs of numbers that add up to 10).

Equipment needed:

- Pre-prepared 8×8 or 10×10 grids, with a single digit in each square.

Rules:

Circle any neighbouring or diagonally adjacent pairs of numbers that are complements to 10. A digit may contribute to more than one pair of complements.

Search for complements to 10

Find two numbers next to each other that add up to 10. Circle them.

1	8	2	0	5	4	6	9
9	3	6	4	5	5	3	2
7	5	1	9	3	2	8	8
1	3	7	1	7	1	5	1
9	5	4	4	6	9	0	8
1	5	0	8	2	9	1	9
6	3	5	5	2	4	5	5
5	7	4	2	8	6	0	6

Game

Complements Ping-Pong

A game for a group of pupils.

Teaching points:

- ▶ The game gives practice in fast recall of the five complement facts.

Equipment needed:

None, although it would be useful to have a way of generating random numbers from 0 to 10, e.g. a die or a pack of number cards.

Rules:

The teacher calls out a number from 0 to 10 and each pupil must immediately 'bounce back' its complement to 10. Any pupil who is too slow is deemed to have dropped the ball and is out, until the next round.

Tip:

This is a quick game that makes a good warm-up activity for the start of a lesson.