

Sorting Cards: Doubles and Halves

Instructions

- Print two copies of page 2, using a different colour of card for each copy.
- Laminate and cut out.
- To make two sets, put the "halves" cards of one colour with the "doubles" cards of the other colour.

Students to work in pairs / small groups as follows

- Shuffle the "halves" cards and put them in a pile face down on the table.
- Put the doubles cards face up on the table so that all the numbers can be seen.
- Each student takes turns to pick up a card from the pile and then finds the corresponding "double" card.

Alternative version

- Shuffle the "doubles" cards and put them in a pile face down on the table.
- Put the halves cards face up on the table so that all the numbers can be seen.
- Each student takes turns to pick up a card from the pile and then finds the corresponding "half" card.

Further ideas

Make sure you use two different colours (see instructions) and include the correct coloured header cards so learners know which cards are halves and which are doubles.

Optional: remove some card pairs to make the game easier / quicker.

- Play as an individual matching game, matching and lining up the cards in columns under the correct headers.
- Play as a paired memory (pelmanism) game:
Place all cards face down. Player 1 turns over one card in each colour (whilst player 2 watches carefully). If the cards 'match' player 1 keeps them and has another go. If the cards don't match they are returned (face down) to their original positions and player 2 takes a turn. Continue until all cards are removed. Player with the most cards wins!

Question bank

- What happens when you double an odd number? *You get an even number.*
- What happens when you double an even number? *You also get an even number.*
- Halving a number is the same as? *Dividing by 2.*
- Doubling a number is the same as? *Multiplying by 2, or repeated addition.*
- Doubling a number and then doubling it again is the same as? *Multiplying by 4.*

Main curriculum link

N1/E2.5 Multiply using single digit whole numbers.

- (a) understand and use the vocabulary of multiplication, e.g. multiplied by, times, lots of.
- (b) understand the operation of multiplication as repeated addition, e.g. $3 \times 5 = 5 + 5 + 5$
- (c) understand that multiplication is commutative, e.g. $2 \times 4 = 4 \times 2$, but the meaning is different e.g. 'take two tablets 4 times a day' is different (4×2) from 'take four tablets twice a day' (2×4).
- (d) know doubles of numbers to 10**
- (e) understand the relationship between halving and doubling**

Halves		Doubles	
1	2	2	4
3	4	6	8
5	6	10	12
7	8	14	16
9	10	18	20
15	20	30	40
25	50	50	100