The longest 2-train

Year 2
Teacher Activity Book

groups

×2

Purpose:

- to generate multiples of 2
- to practise calculating multiples of 2
- to use the known facts for the ×2 table to derive new facts

Resources (per group): interlocking cubes (three different colours), 1–6 dice

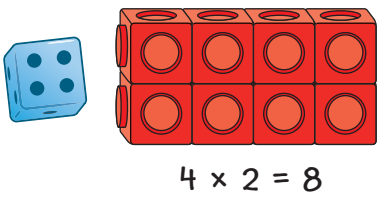
In this activity children work in groups of two or more to make trains to show the ×2 table facts. They take turns to roll the dice. They make a train the length of the dice number rolled and two cubes wide to show the dice number multiplied by 2. They also write the matching multiplication statement.

As they move from T to S to D they begin to use the facts they know to derive new ones.

Towards

One child rolls the dice and makes a train of cubes to represent the number they rolled, multiplied by 2, and write the multiplication underneath.

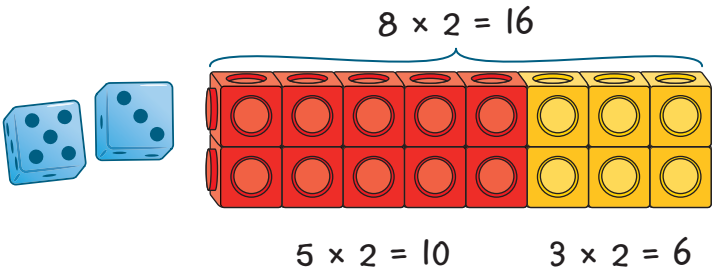
Play continues, with other children taking turns to roll the dice and make a train. The child that makes the longest train by the end of the game wins.



How long is your train? What ×2 table fact does your train show?

Securing

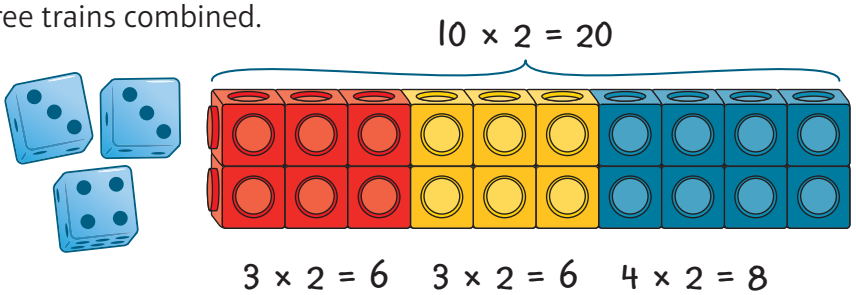
Similar to Towards, but this time, children make two trains with two different colour cubes. They write the multiplication fact each train shows. They join the trains together to make a longer train. They write the multiplication fact the longer train shows.



What ×2 table fact does your yellow train show?
What ×2 table fact does your red and yellow train show?

Deeper

Similar to Securing, but this time children roll the dice three times and make trains of three different colours. They write down the individual fact for each smaller train, then the multiplication fact for the three trains combined.



Mystery number

Groups

×5

Purpose:

- to use the ×5 table facts to notice the properties of the multiples of 5
- to notice what happens to an odd/even number when it is multiplied by 5

Resources (per group): PCM M, 1–6 dice, counters (1 per player in different colours), individual whiteboard or paper and pen

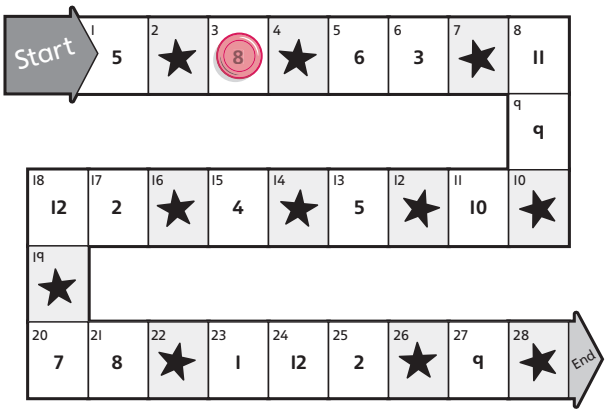
In this activity children play in small groups (2–4 children). They use the game board on PCM L to practise their ×5 table facts in a random order. They win a point for a correct answer and the player that collects the most points by the end of the game board is the winner.

As they move from T to S to D they identify multiples of 5 based on their properties and complete missing-number sentences.

Towards

Each child places their counter on Start on the game board on PCM M.

One child rolls the dice and moves that many places on the game board. They multiply the number they land on by 5 and write the product. If the rest of the group agree they are correct, they collect 1 point. If they land on a mystery number (shown as a star on the game board), they do not collect any points. The next child does the same thing. Play continues like this until all the group have reached the end of the game board. The player with the most points is the winner.



8 × 5 = 40

Securing

Same as Towards, but this time if a child lands on a mystery number they ask the other children a ×5 table fact, such as 'What is 25 ÷ 5?' or 'What is 7 × 5?' The first child to answer correctly wins 1 point.

Is the number even? Is the number odd?
How can you check your answer is correct?

Deeper

Same as Towards, but this time if a child lands on a mystery number they think of a multiple of 5 and write it down without showing the rest of the group. The other children try to work out the mystery number by asking the child three questions, which can only be answered 'yes' or 'no'. If a child works out the mystery number they win 3 points.

Funny poems

Whole class

mixed practice

Purpose:

- to help children remember the ×2, ×5 and ×10 table facts using rhyme

Resources (per pair): paper and pens, A3 paper (or larger; for display)

In this activity children work together to create a poem about the facts in the ×2, ×5 and ×10 tables. They take one fact per pair and create a two-line rhyme. These are joined together to make a poem for everyone to memorise.

As they move from T to S to D children write their own poems for a complete times table.

Discuss some of the famous songs that children may know so that they can use the rhythm and sing the music. On the board write a few words that rhyme (or nearly rhyme) with number words, for example:

1 bun, none, fun	2 shoe, glue	3 bee, agree, me	4 door, sore, store
5 dive, drive	6 sticks, fix, bricks	7 heaven, Bevan	8 gate, plate
9 climb, fine, mine	10 hen, pen, Jen	11 Devon, Evan	12 shelves, elves,

Towards

With children together, create a two-line rhyme for one of the multiplication facts from the ×2 table. Start the rhyme and let children finish it. For example, the first six facts in the ×2 table could be:

One 2 is 2 / 2 laces on my shoes

Two 2s are 4 / 4 knocks on the door

Three 2s are 6 / 6 magic sticks

Four 2s are 8 / 8 apples on a plate

Five 2s are 10 / 10 eggs laid by a hen

Six 2s are 12 / 12 books on the shelves

What rhymes with 12?

Securing

Children work in pairs and choose facts from the ×2, ×5 and ×10 tables for their two-line poems. Collect the rhymes in order, write them on a large sheet of paper and say the whole poem together.

Encourage pairs to work on different facts so that poems for each whole times table can be generated. Display finished poems around the classroom or publish them in the school newsletter.

Deeper

Children write a whole poem of their own based on the ×2, ×5 or ×10 table. For extra challenge, they can continue beyond the 12th multiple.

PCM M

Start
1
5
2
3
8
4
5
6
6
3
7
8
11
9
9
10
10
11
12
13
5
14
15
4
16
17
2
18
12
19
20
7
21
8
22
23
1
24
12
25
2
26
27
9
28
End

Assessment: Mixed tables 2

T	S	D
1 $2 \times 2 =$ ☐	9 $11 \times 2 =$ ☐	17 $5 \times 12 =$ ☐
2 $10 \times 5 =$ ☐	10 $5 \times 1 =$ ☐	18 $2 \times 5 = 10 \times$ ☐
3 $5 \times 5 =$ ☐	11 $7 \times 10 =$ ☐	19 $45 \div 9 =$ ☐
4 $3 \times 2 =$ ☐	12 $2 \times 8 =$ ☐	20 $12 = 24 \div$ ☐
5 $1 \times 10 =$ ☐	13 $5 \times 7 =$ ☐	21 $110 \div$ ☐ $= 11$
6 $4 \times 5 =$ ☐	14 $12 \times 5 =$ ☐	22 $8 \times$ ☐ $= 4 \times 10$
7 $3 \times 10 =$ ☐	15 $4 \times 10 =$ ☐	23 $2 \times 3 \times$ ☐ $= 30$
8 $10 \times 2 =$ ☐	16 $5 \times 6 =$ ☐	24 $70 \div$ ☐ $= 5 \times 2$

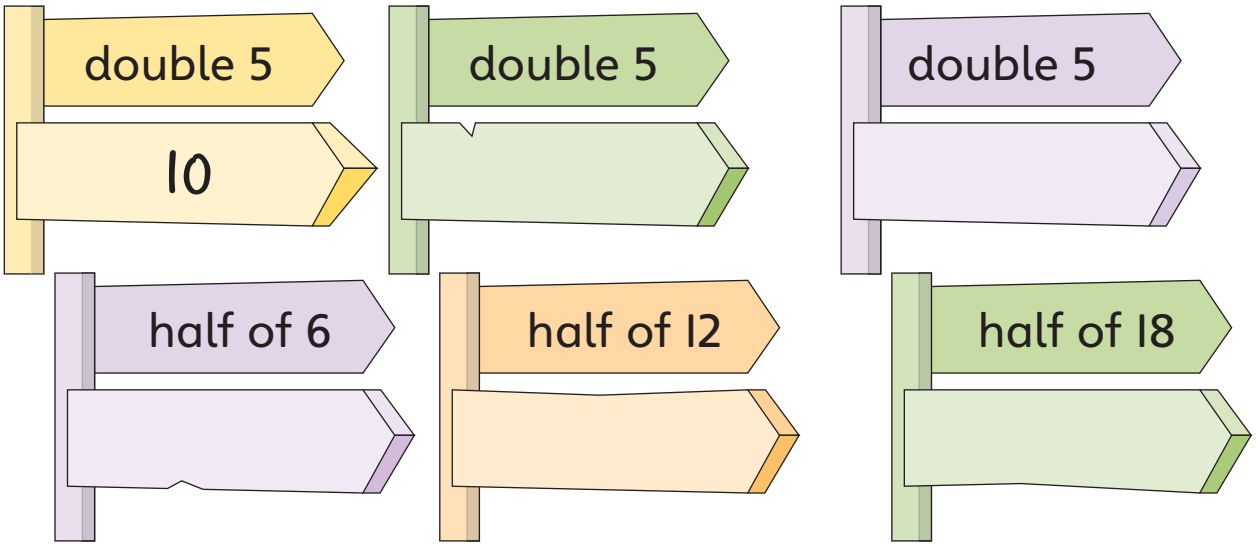
T There are 10 boxes of eggs. There are 6 eggs in each box. How many eggs are there altogether?

S Write two division sentences using these numbers: 5, 8, 40

D Paul is thinking of a number. He multiplies it by 2, then multiplies it by 5. The answer is 60. What number is Paul thinking of?

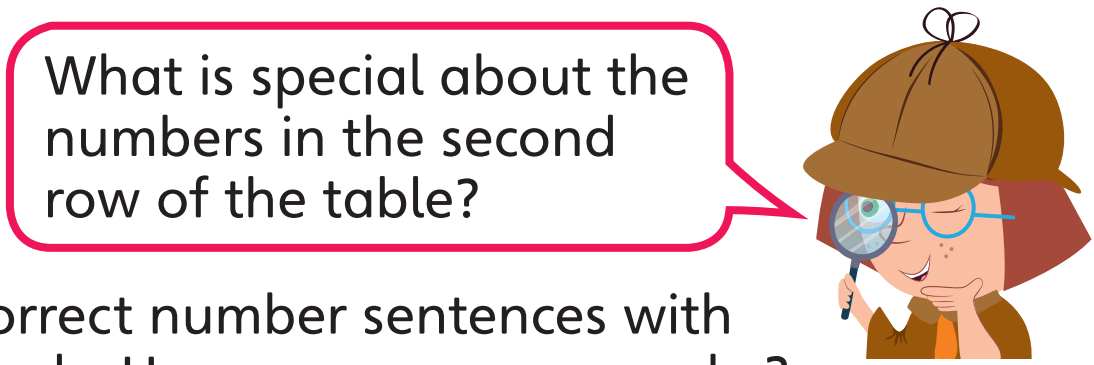
Double or halve

T Write the answers on the signs.

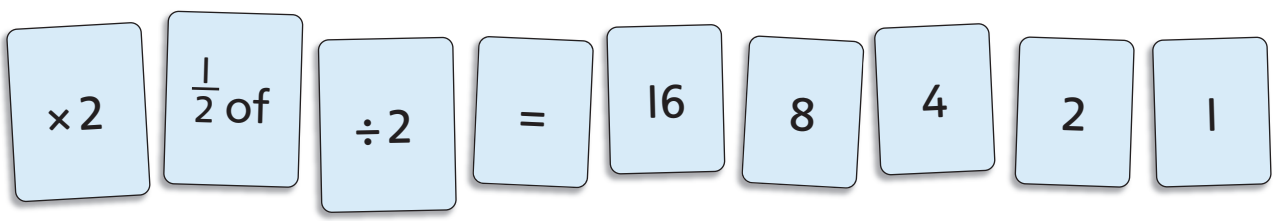


S Double or halve the numbers to complete the table.

Double	2	7	8	1	12	5			
	4					10	12	20	8

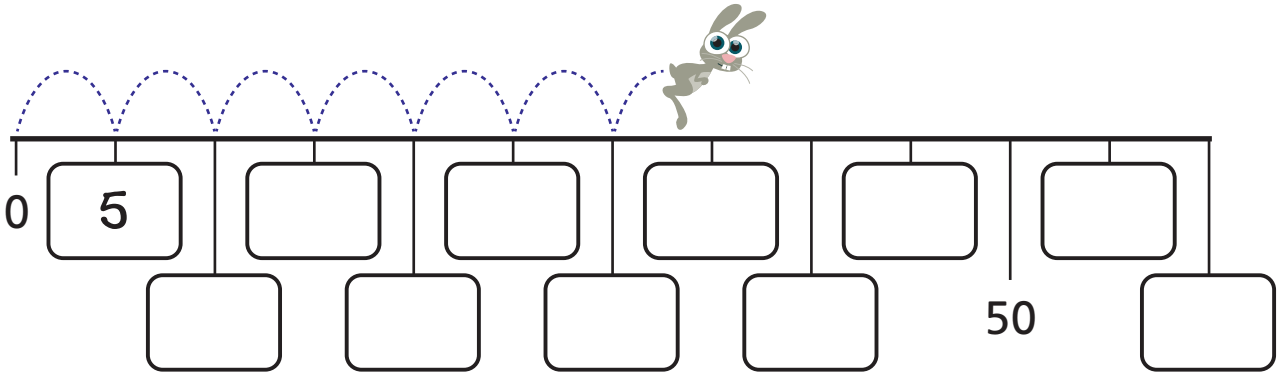


D Make correct number sentences with these cards. How many can you make?

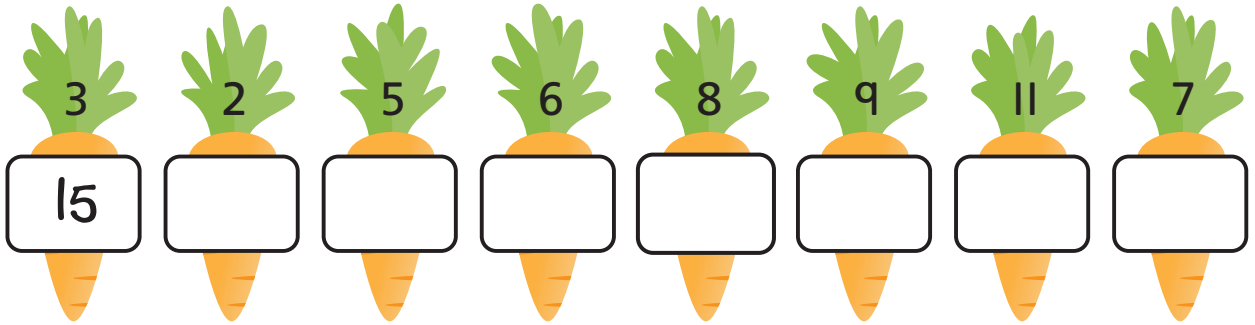


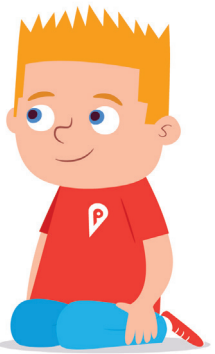
High 5s

T Count on in 5s and fill in the missing numbers.



S Multiply each number by 5.





D Colour each multiplication and its answer in the same colour. Use a different colour for each pair.

4 × 5	9 × 5	7 × 5
6 × 5	11 × 5	8 × 5
5 × 5	3 × 5	12 × 5

55	51	42	45
15	60	35	20
25	47	40	30

Some numbers do not have a matching multiplication. Which numbers?

Bingo

T Complete the table.

	×2	×5	×10
6	12		
7			
9			

Multiply the number on the left of the grid by 2, by 5 and by 10.

S Colour the answers on the bingo cards. Which card gets three in a line to win?

20 ÷ 2 | 5 × 5 | 10 × 10 | 35 ÷ 5 | 9 × 5 | 16 ÷ 2

8 × 5 | 30 ÷ 5 | 11 × 5 | 40 ÷ 10 | 12 × 2

BINGO			
	8	9	100
	80	120	4
	25	35	22

BINGO			
	10	45	24
	7	160	45
	80	30	24

BINGO			
	40	50	102
	6	101	30
	5	14	55

D Write one ÷2, ÷5 or ÷10 fact for each number on the bingo card.

BINGO			
	3	9	1
	7	8	6
	5	11	15

6 ÷ 2		