# Dividing by 2

## Discover

**1** a) 8 players practise in pairs.

How many groups of 2 are there?

$8 \div 2 =$ ☐

b)

I worked it out using $4 \times 2 = 8$ from the 2 times-table.

Explain how Flo used that number fact to solve the problem.

## Share

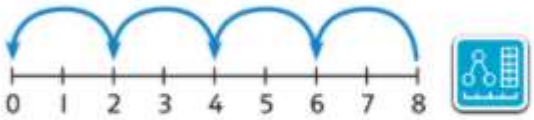
I used a drawing to help me.

I used the 2 times-table to help me.

a)

8 players make 4 pairs.

Keep subtracting 2 from 8. You can subtract it 4 times.






$8 \div 2 = 4$

There are 4 groups of 2.

b) There are 8 players. There are 2 players in each group.

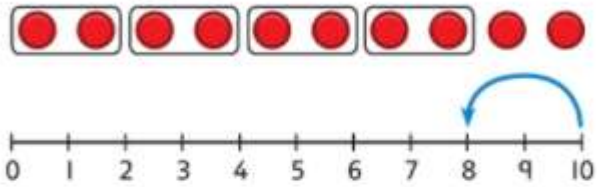
The drawing reminds me that 4 groups of 2 is 8. So $8 \div 2 = 4$.

$1 \times 2 = 2$
$2 \times 2 = 4$
$3 \times 2 = 6$
$4 \times 2 = 8$
$5 \times 2 = 10$
$6 \times 2 = 12$
$7 \times 2 = 14$
$8 \times 2 = 16$
$9 \times 2 = 18$

## Think together

**1** 2 more players want to join in.

How many groups of 2 can be made now?

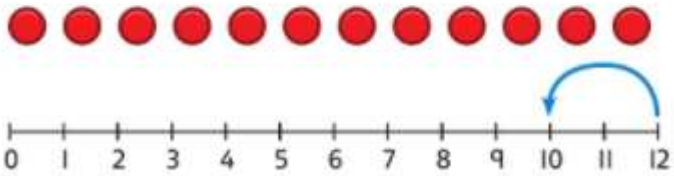



$5 \times 2 = 10$

So $10 \div 2 =$ ☐.

**2** 12 players are now on the court.

How many groups of 2 can these players make?




☐ × 2 = ☐ so $12 \div 2 =$ ☐.

What if there were 14 players, 16 players or 18 players?

**3** Every 2 players can be paired up for practising tennis. On a 100 square, colour the numbers that can be divided by 2 or use counters to mark them.

CHALLENGE

Did you find a pattern?

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
|---|---|---|---|---|---|---|---|---|---|
| 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 |
| 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 |
| 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 |
| 41 | 42 | 43 | 44 | 45 | 46 | 47 | 48 | 49 | 50 |
| 51 | 52 | 53 | 54 | 55 | 56 | 57 | 58 | 59 | 60 |
| 61 | 62 | 63 | 64 | 65 | 66 | 67 | 68 | 69 | 70 |
| 71 | 72 | 73 | 74 | 75 | 76 | 77 | 78 | 79 | 80 |
| 81 | 82 | 83 | 84 | 85 | 86 | 87 | 88 | 89 | 90 |
| 91 | 92 | 93 | 94 | 95 | 96 | 97 | 98 | 99 | 100 |

What do you notice about which columns the numbers are in?