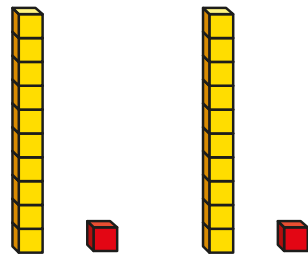


11 and 12 times-table



- 1 The base 10 represents 2×11



$$2 \times 11 = 22$$

Use base 10 to work out 3×11

Draw your base 10 and complete the multiplication.

$$3 \times 11 = \boxed{}$$

- 2 Complete the calculations.

$$5 \times 11 = \boxed{}$$

$$7 \times 11 = \boxed{}$$

$$9 \times 11 = \boxed{}$$

$$4 \times 11 = \boxed{}$$

$$6 \times 11 = \boxed{}$$

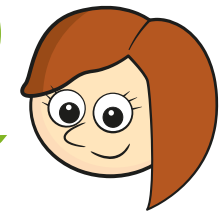
$$3 \times 11 = \boxed{}$$

$$10 \times 11 = \boxed{}$$

$$12 \times 11 = \boxed{}$$

- 3 Rosie is spotting patterns in the 11 times-table.

When I add together the digits of each multiple of 11, I always get an even number.



$$2 \times 11 = 22$$

$$2 + 2 = 4 \text{ which is an even number}$$

- a) Do you agree with Rosie? _____

Explain your answer.

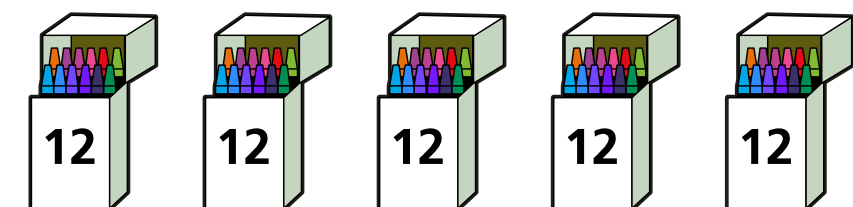
- b) What else do you notice?

What other patterns can you see in the 11 times-table?

Talk about it with a partner.

- 4 Crayons come in packs of 12

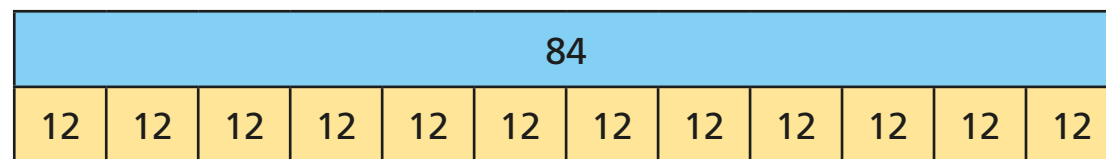
Dora buys 5 packs of crayons.



How many crayons does she have?

Dora has $\boxed{}$ crayons.

- 5 Ron uses a bar model to represent 84 divided by 12

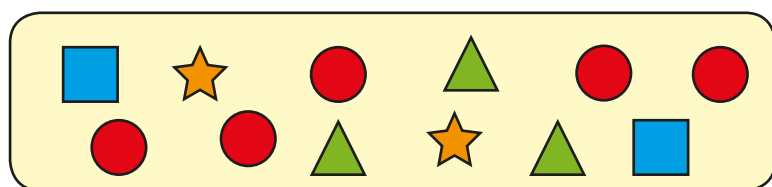


- a) Explain Ron's mistake.

- b) Draw the correct bar model diagram to represent 84 divided by 12

- 6 Amir is making pictures using shapes.

Here is one picture.

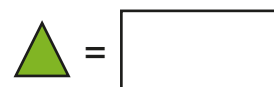
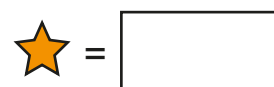
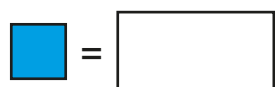


Amir makes 12 pictures like this one.

- a) How many shapes does he use altogether?

Show your working.

- b) If each picture is exactly the same, how many of each shape does Amir use?



- 7 Mr Scott is organising a cricket tournament.

- a) There are 11 players in a cricket team.

5 teams have signed up for the tournament.

How many players have signed up?

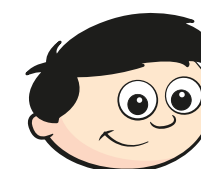
- b) Mr Scott needs 132 players signed up to go ahead with the tournament.

How many more teams are needed?

more teams are needed.

- 8 Dexter has been looking at the 12 times-table.

He notices something when he adds the digits of the multiples of 12 together.



$$\begin{aligned} 1 + 2 &= 3 \\ 2 + 4 &= 6 \\ 3 + 6 &= 9 \\ 4 + 8 &= 12 \end{aligned}$$

- a) Dexter thinks the next number in the pattern will be 15

Is he correct? _____

Explain your answer. _____

- b) What happens when he tries this for all the multiples of 12 up to 12×12 ?

Is there a pattern?

