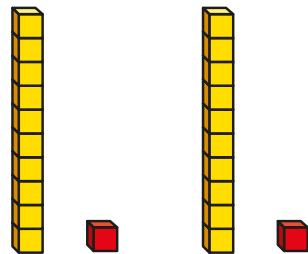


11 and 12 times-table



- 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.

1. 1. 1.

$$3 \times 11 = \boxed{33}$$

- 2 Complete the calculations.

$$5 \times 11 = \boxed{55}$$

$$7 \times 11 = \boxed{77}$$

$$9 \times 11 = \boxed{99}$$

$$4 \times 11 = \boxed{44}$$

$$6 \times 11 = \boxed{66}$$

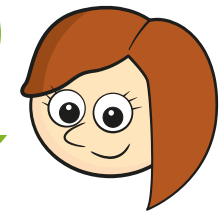
$$3 \times 11 = \boxed{33}$$

$$10 \times 11 = \boxed{110}$$

$$12 \times 11 = \boxed{132}$$

- 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? Yes

Explain your answer.

Various answers.

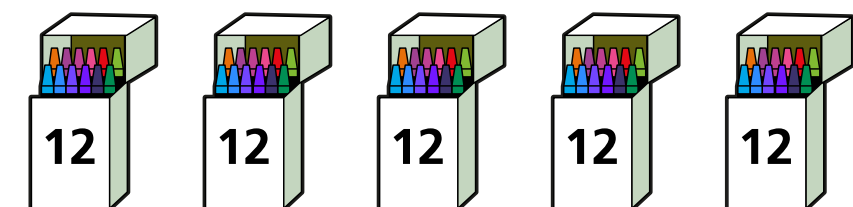
- b) What else do you notice?

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

Talk about it with a partner.

- 4 Crayons come in packs of 12

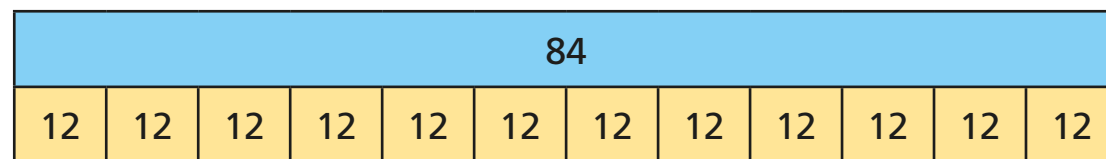
Dora buys 5 packs of crayons.



How many crayons does she have?

Dora has 60 crayons.

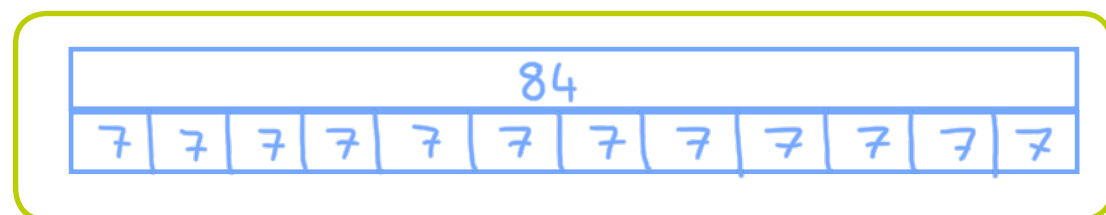
- 5 Ron uses a bar model to represent 84 divided by 12



- a) Explain Ron's mistake.

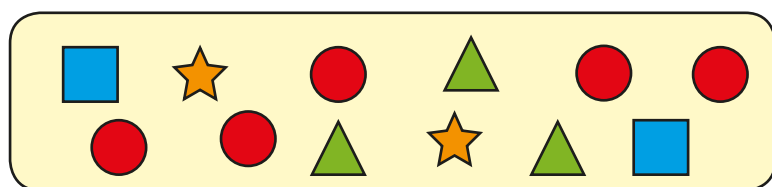
He has split his bar into 12 sections
and wrote 12 in each.

- 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.

144

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

= 24

= 60

= 24

= 36

- 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?

55

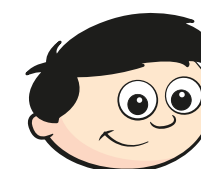
- b) Mr Scott needs 132 players signed up to go ahead with the tournament.

How many more teams are needed?

7 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.



$1 + 2 = 3$
 $2 + 4 = 6$
 $3 + 6 = 9$
 $4 + 8 = 12$

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

Is he correct? No

Explain your answer. $6 + 0 = 6$

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

Is there a pattern?

