

# Maths

18.1.21



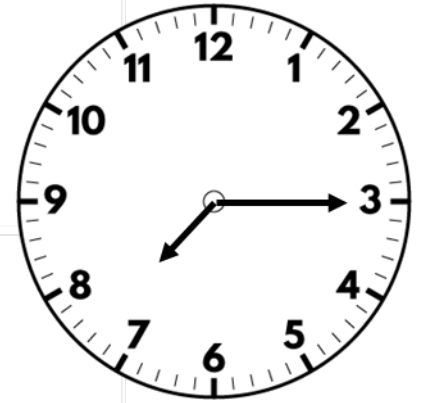
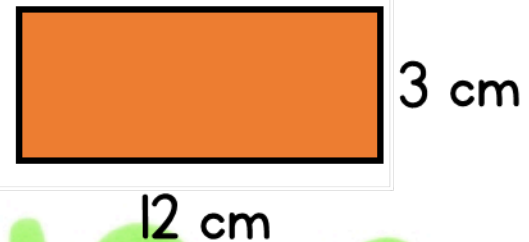
# Mental & Oral Starter

1) What is  $10 \times 7$ ?

2) Work out  $90 \div 10$

3) What is seven multiplied by one?

4) Find the perimeter of  
the rectangle.



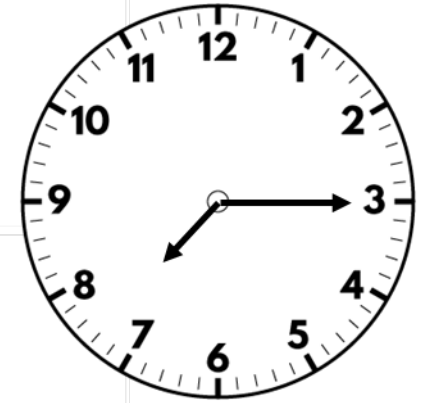
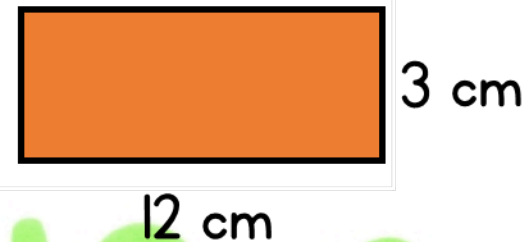
# Mental & Oral Starter

1) What is  $10 \times 7$ ? **70**

2) Work out  $90 \div 10$  **9**

3) What is seven multiplied by one? **7**

4) Find the perimeter of  
the rectangle. **30 cm**

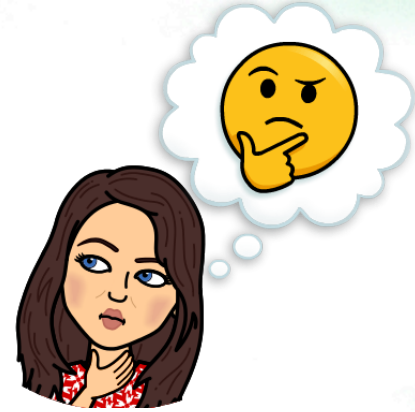


# WALT: Identify factor pairs

S2S: I can

- Know what a factor is
- Use my times table knowledge to identify factor pairs
- Apply my knowledge of factor pairs





# Let's Learn



# What are factors?

[Watch the following clip:](#)

<https://www.bbc.co.uk/bitesize/topics/zfq7hyc/articles/zp6wfcw>



# What is a factor?

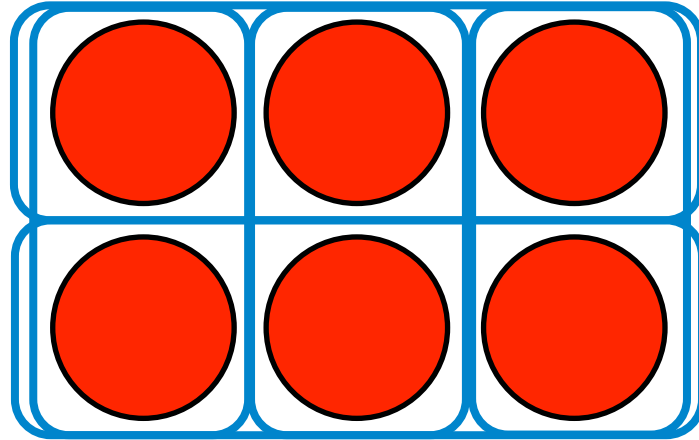
- Factors are numbers that divide exactly into another number.
- For example, the factors of 8 are:  
1,2,4,8
- Factors can be shown in pairs. A factor pair is found by identifying the two whole numbers which multiply together to get the product.
- The factor pairs of 8 can be shown:
  - $1 \times 8 = 8$
  - $2 \times 4 = 8$

$$1 \times 8 = 8$$

factor  $\times$  factor = product



What is a factor?



2 rows of 3 are equal to 6

$$2 \times 3 = 6$$

factor (pointing to 2)  
factor (pointing to 3)  
product (pointing to 6)

3 columns of 2 are equal to 6

$$3 \times 2 = 6$$

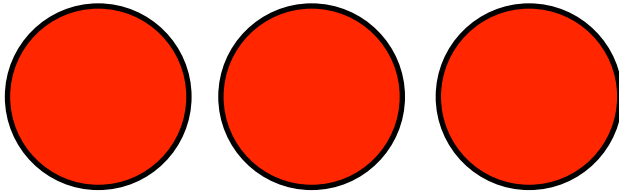
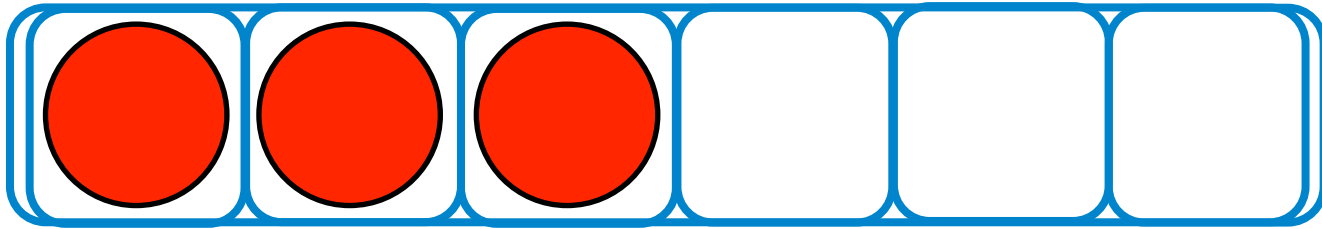
**2 and 3 are factors of 6**

Are there any other factors of 6?

Have a think







1 row of 6 is equal to 6

$$1 \times 6 = 6$$

factor (pointing to 1)  
factor (pointing to 6)  
product (pointing to 6)

6 columns of 1 are equal to 6  $6 \times 1 = 6$

**1 and 6 are factors of 6**

**The factors of 6 are: 1, 2, 3 and 6**

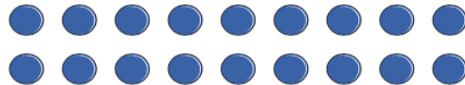
# Independent Practice 1:

Alex is making arrays using counters.

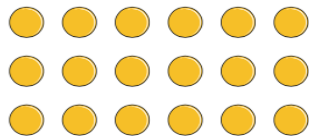
a) What calculation is represented in each array?



$$\square \times \square = 18$$



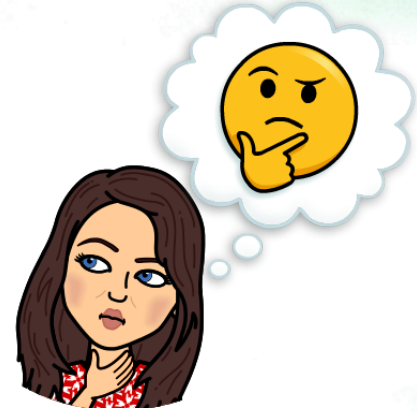
$$\square \times \square = 18$$



$$\square \times \square = 18$$

b) Use your answers from part a) to help you write all the factors of 18

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# Let's Learn

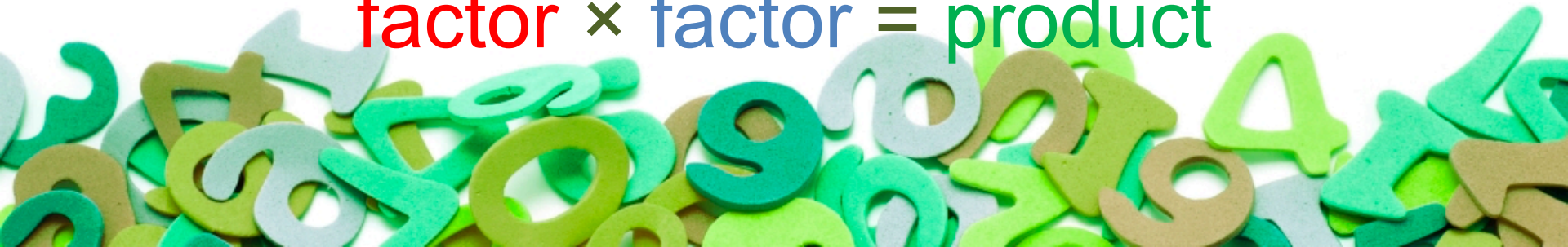


# Let's recap...

- Factors can be shown in pairs. A factor pair is found by identifying the two whole numbers which multiply together to get the product.
- The factor pairs of 8 can be shown:
  - $1 \times 8 = 8$
  - $2 \times 4 = 8$

$$1 \times 8 = 8$$

**factor**  $\times$  **factor** = **product**



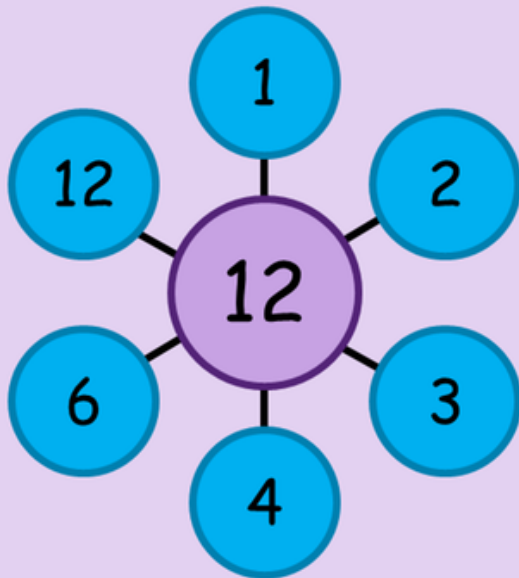
What are the factors of 12?

Write them down.

12



Here are all the factors of 12:



$$1 \times 12 = 12$$
$$2 \times 6 = 12$$
$$3 \times 4 = 12$$

It is usual to write the factors of a number in an ordered list, like this:

The factors of 12 are 1, 2, 3, 4, 6, 12.

### Top Tip

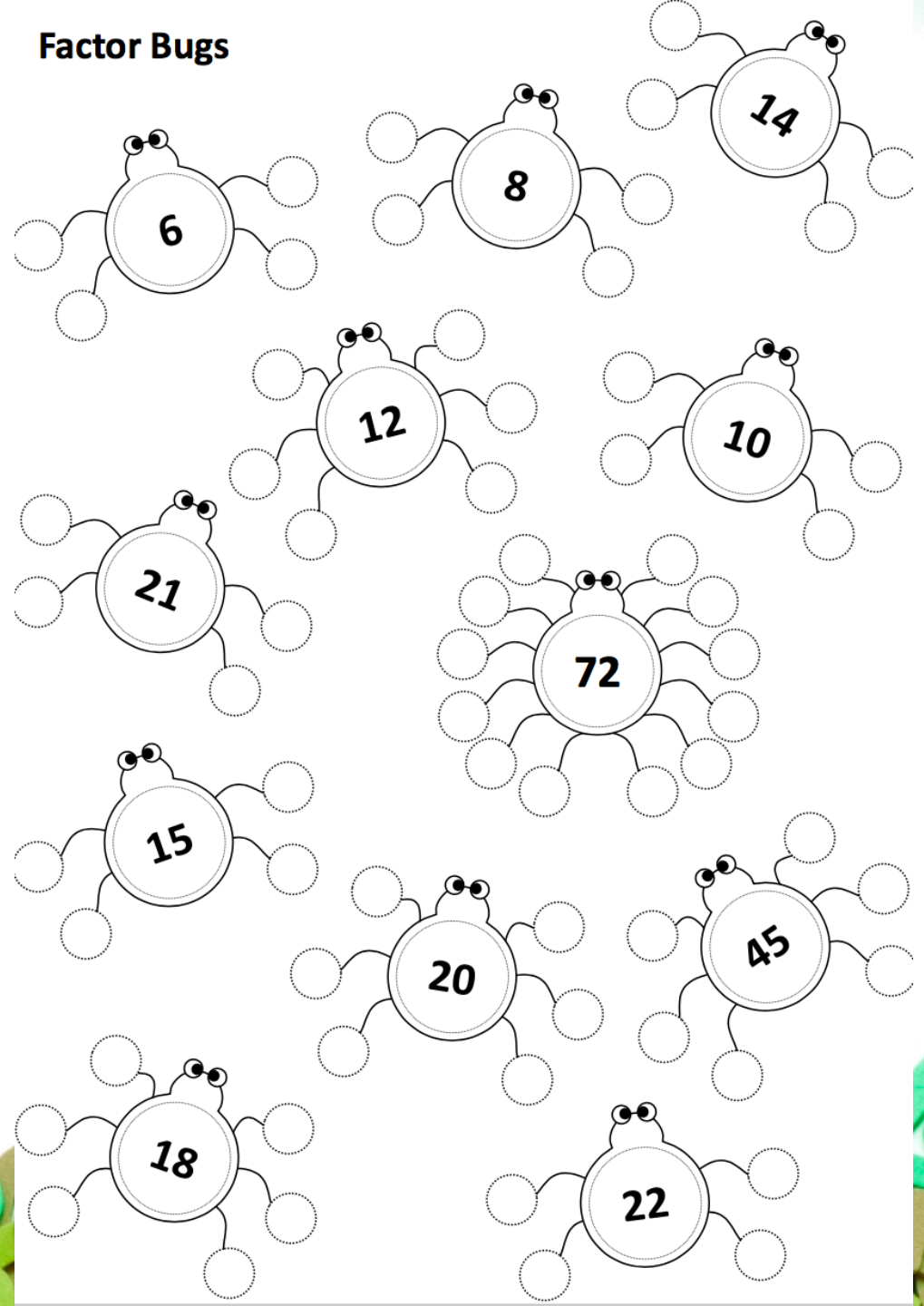
Learn your times tables thoroughly to easily find factors.



# Factor Bugs

## Independent Practice 2:

Complete the factor bugs.



# Challenge



Tommy says



The greater the number, the more factors it will have.

Is Tommy correct?

Use arrays to explain your answer.

