

# Maths

7.1.21



# Mental & Oral Starter

- Let's warm up by using our counting stick to count up in the 9x tables!
- Are you ready!?



# WALT: Multiply and divide by 9

S2S: **I can**

- Use a variety of representations to multiply by 9
- Use a variety of representations to divide by 9

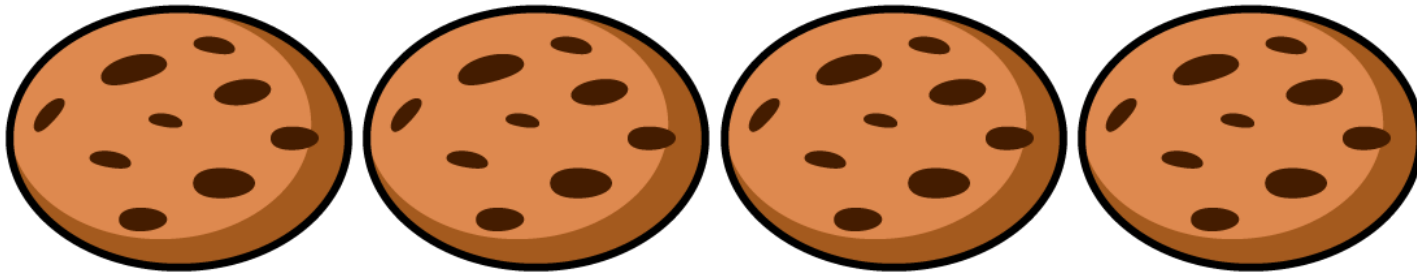




# Let's Learn



Complete the missing numbers.

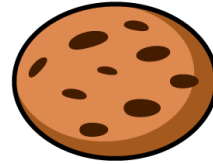
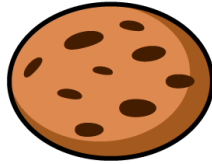
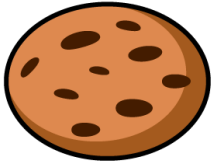


There are 4 cookies.

There are 9 chocolate chips in each cookie.

There are 36 chocolate chips altogether.





There are 4 cookies.

There are 9 chocolate chips in each cookie.

There are 36 chocolate chips altogether.

$$9 + 9 + 9 + 9 = 36$$

$$4 \times 9 = 36$$

$$9 \times 4 = 36$$





Each packet contains 9 sweets.



$$9 + 9 + 9 + 9 + 9 + 9 = 54$$

$$6 \times 9 = 54$$

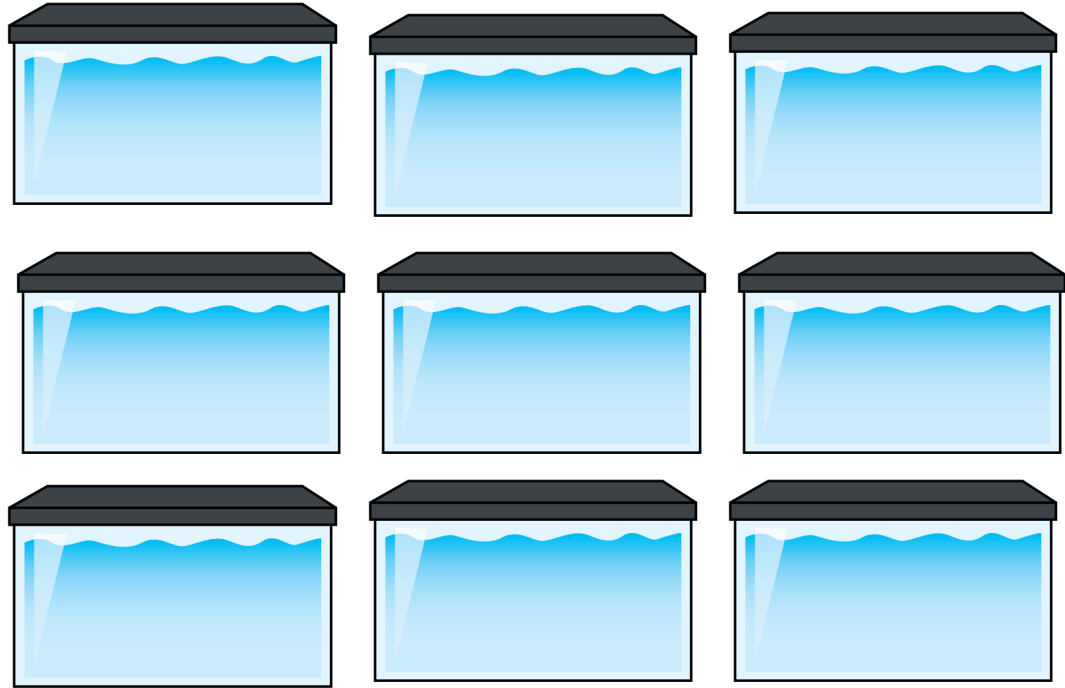
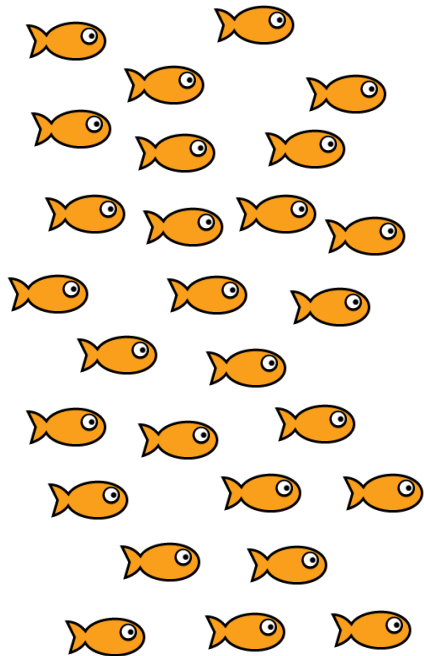
$$9 \times 6 = 54$$



There are 27 fish.

An equal amount are put into each of the 9 tanks.

How many fish are put in each tank?



$$27 \div 9 = 3$$

Total number of fish

Number of fish tanks

Number of fish in each tank

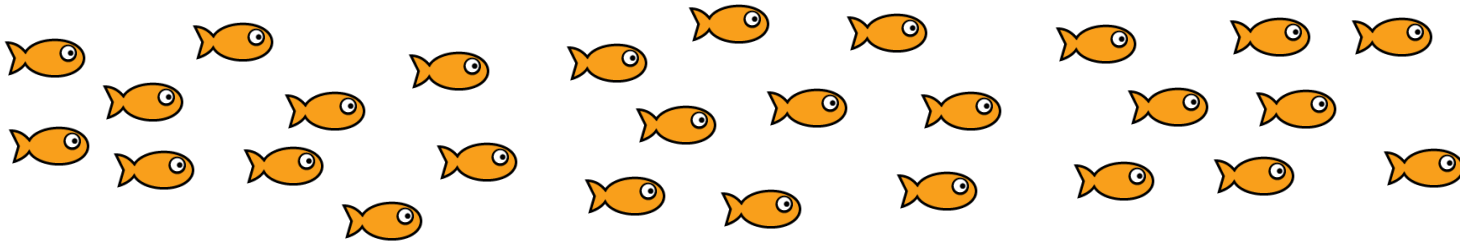




There are 27 fish.

9 fish are put in each tank.

How many tanks are needed for all the fish?



$$27 \div 9 = 3$$

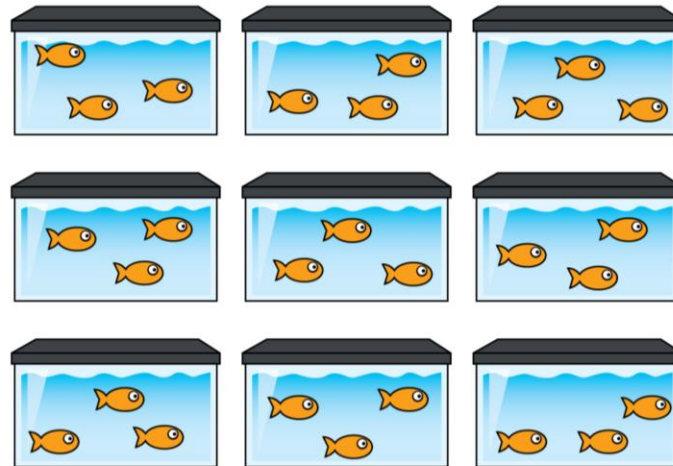
Total number of fish

Number of fish in each tank

Number of tanks



# Sharing



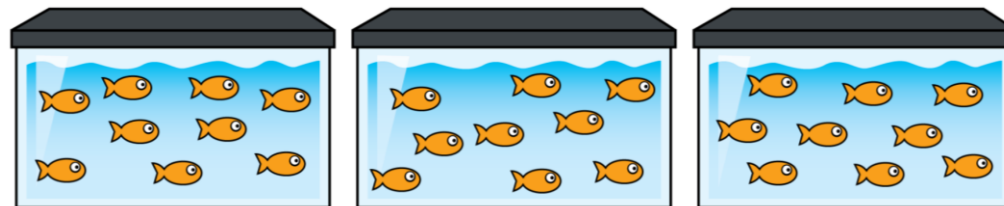
$$27 \div 9 = 3$$

Total number of fish

Number of fish tanks

Number of fish in each tank

# Grouping

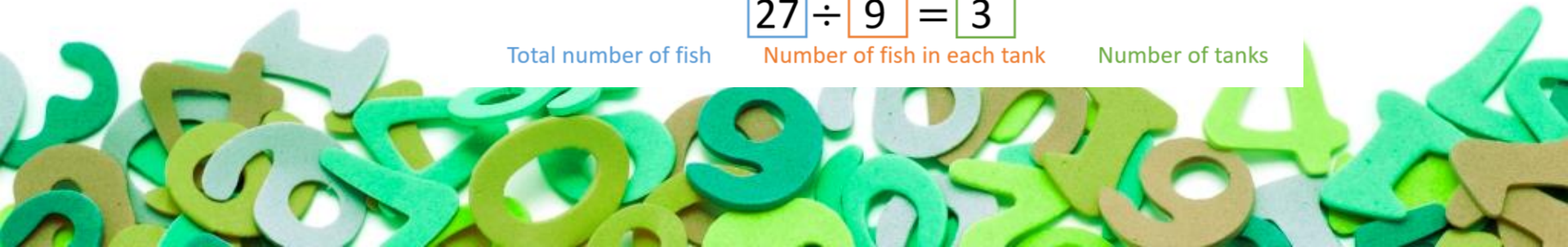


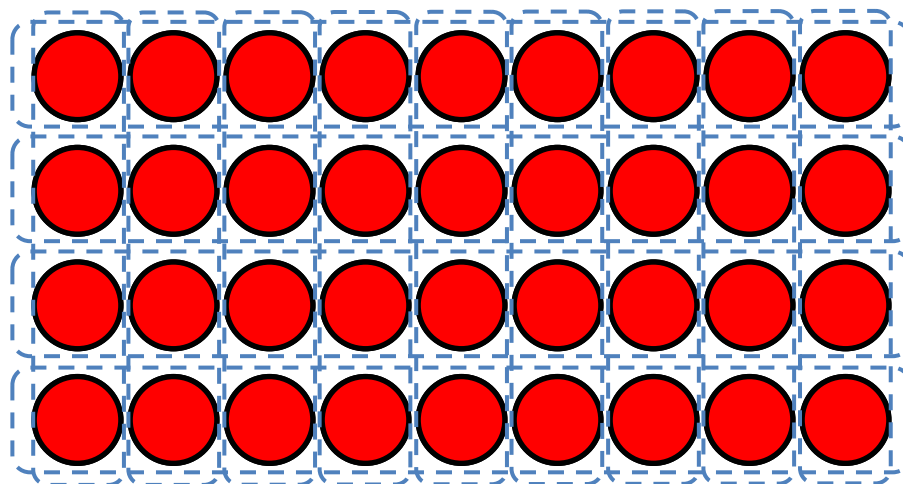
$$27 \div 9 = 3$$

Total number of fish

Number of fish in each tank

Number of tanks





$$9 \times 4 = 36$$

$$4 \times 9 = 36$$

$$36 \div 4 = 9$$

$$36 \div 9 = 4$$



# Independent Practice



## Complete today's worksheet:

Multiply and divide by 9



1 Complete the sentences.

a)



There are  boxes.

There are  chocolates in each box.

There are  chocolates altogether.

$$2 \times 9 = \square$$

b)



There are  cubes.

There are  faces on each cube.

There are  faces altogether.

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

2 There are 9 players in a baseball team.

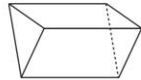
a) How many players are there in 7 baseball teams?

There are  players in 7 baseball teams.

b) If there are 81 players, how many full teams are there?

There are  full teams.

3 A triangular prism has 9 edges.



Use this information to complete the sentences.

a) 5 triangular prisms have  edges.

b)  triangular prisms have 90 edges.

c)  triangular prisms have 99 edges.

d) 6 triangular prisms have  edges.



4 Complete the number sentences to describe the array.



$$3 \times 9 = \square$$

$$9 \times \square = \square$$

$$\square \div 9 = 3$$

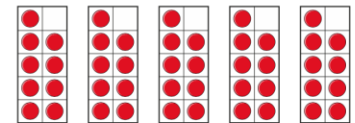
$$\square \div \square = 9$$

5 There are 9 coloured squares on each face of a puzzle cube.



How many coloured squares are there on the whole puzzle cube?

6 Eva is making groups of 9 on ten frames.



How can Eva work out how many counters she has altogether?

Compare your method with a partner.

7 Here is a number puzzle.

$$\square \times \square \times \triangle = 81$$

Find three different values of the square and triangle.

$$\triangle = \square \quad \triangle = \square \quad \triangle = \square$$

$$\square = \square \quad \square = \square \quad \square = \square$$





# Self-Assessment

- Have you been successful today?
- How do you know?

WALT: Multiply and divide by 9

S2S: I have

-**Used** a variety of representations to multiply by 9

-**Used** a variety of representations to divide by 9

