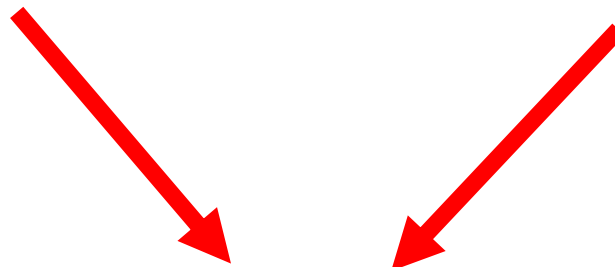


Lesson 6-

I can multiply 3
numbers - reasoning and
problem solving

Recap- how to multiply 3 numbers.

$$9 \times 5 \times 2 =$$


$$9 \times 10 = 90$$

Starter-

Answer the question $5 \times 4 \times 2 =$

- 1) What would you do first to work it out?
- 2) Which is the easiest way to solve the problem?

Starter- answer

Answer the question $5 \times 4 \times 2 = 40$

1) What would you do first to work it out?

- Multiply 2 numbers first.

2) Which is the easiest way to solve the problem?

- Multiplying $5 \times 2 = 10$ $10 \times 4 = 40$ could be a quicker solution to $5 \times 4 = 20$ $20 \times 2 = 40$

Reasoning

Tick the best way to group the numbers in the calculation below.

$$7 \times 4 \times 3$$

$$3 \times 4 \times 7$$

Explain your choice.

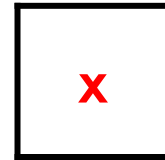
Reasoning

Alike the starter, you need to find the best way to multiply the numbers.

$$7 \times 4 \times 3$$



$$3 \times 4 \times 7$$



Explain your choice.

3 x 4 x 7 is the best way to group the numbers as 3 X 4 = 12, 12 x 7 is easier to work out, than 7 X 4 = 28, 28 X 3.

Problem Solving

Arrange the cards to create a multiplication number sentence.

Top tip:

Use the information you've got > to find solutions.

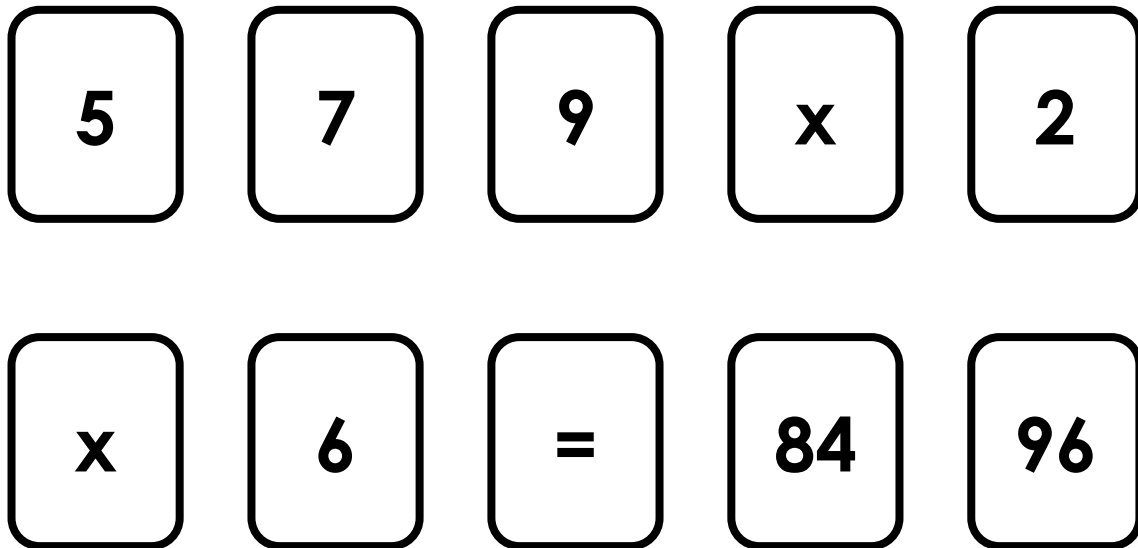
The bigger numbers are going to be your answers, so which numbers can multiply together to make these answers?

5	7	9	x	2
x	6	=	84	96

Which cards cannot be used?

Problem Solving- answer

Arrange the cards to create a multiplication number sentence.



A possible solution could be:

$$6 \times 2 \times 7 = 84$$

$$6 \times 2 = 12$$
$$12 \times 7 = 84$$

Which cards cannot be used? 5, 9, 96

Can you find any other solutions?

Try and complete activity 6- use your reasoning and problem-solving skills to help you find multiplication facts which can complete the number sentences.