

Flashback

4

Year 6 | Week 1 | Day 1

1) 10% of a number is 40. What is the number?

400

2) Work out 50% of 120?

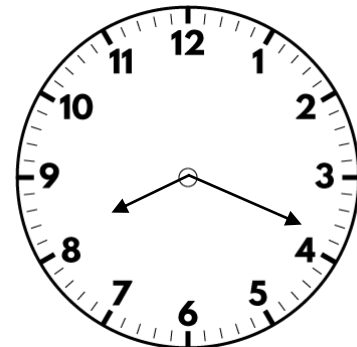
60

3) Multiply 4.36 by 100

436

4) Work out $\frac{3}{4} + \frac{3}{5}$

$1\frac{7}{20}$



RECALL

Write your 15 times table up to 15×15 .

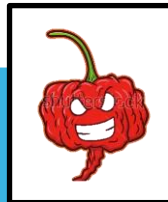
What is the 3rd number in the sequence?

What is the 12th number in the sequence?

What would the 20th number in the sequence?

What would the 100th number in the sequence?

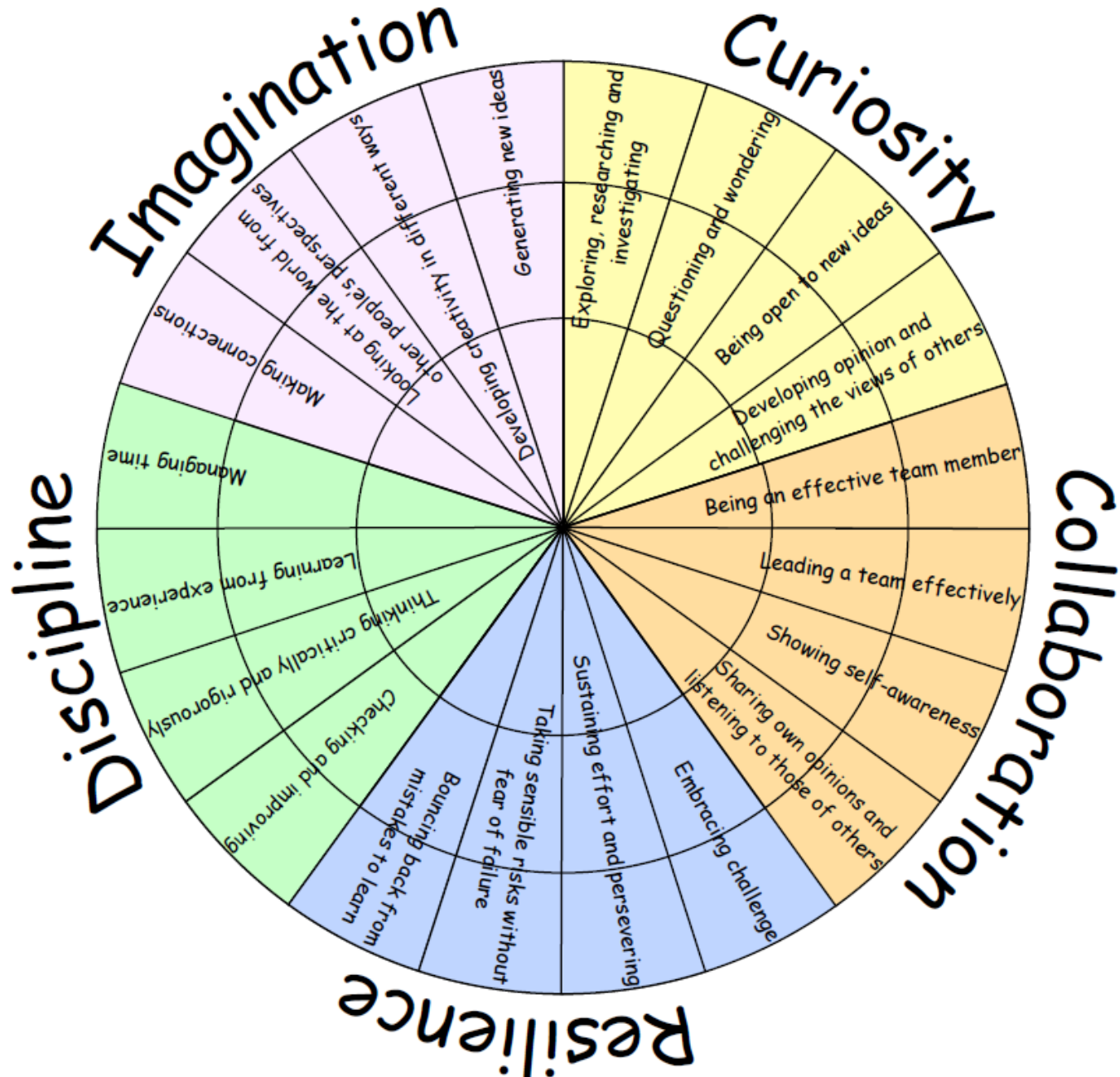
How could I work out any number in the sequence?



I CAN MAKE
GENERALISATIONS
ABOUT SINGLE STEP
NUMBER PATTERNS AND
EXPRESS THEM
ALGEBRAICALLY

PROPERTIES OF NUMBER (21IV)

LEARNING HABITS?



GUIDED PRACTICE

- 1) Create a table showing the number of frogs (f) and the number of legs (l).
- 2) Can it work out the number of legs (l) for any number of frogs?

1 frog 4 legs; 2 frogs 8 legs;
3 frogs 12 legs; ...

This nursery rhyme can go on forever.
What if we sang 100 verses or more?



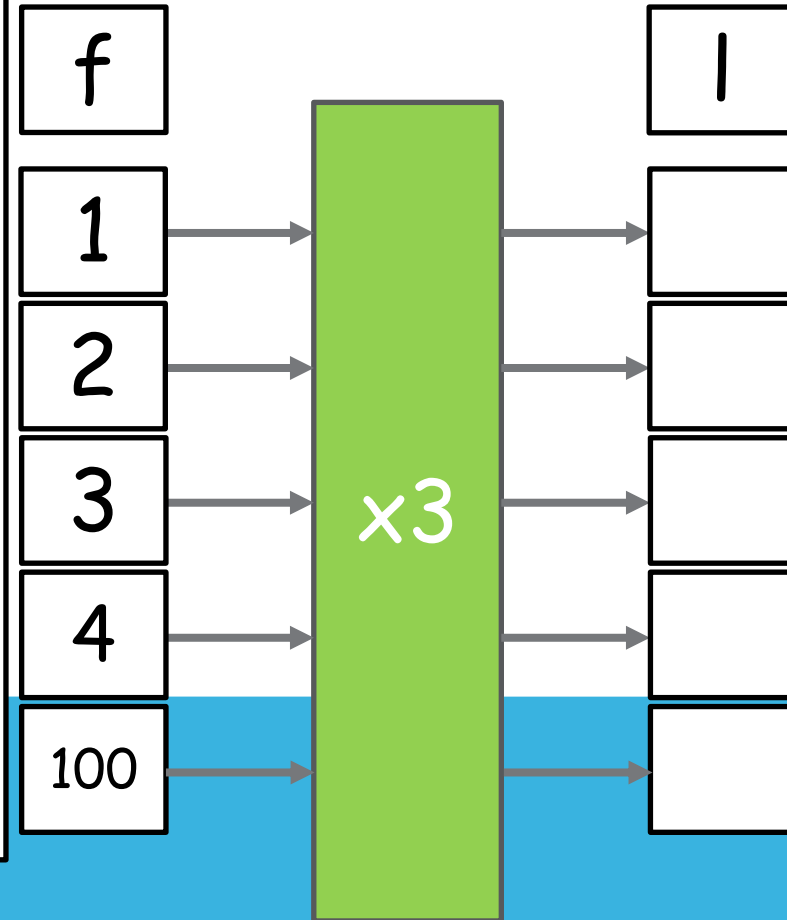
What are the rules for the number of eyes (e) or mouths (m) a frog has?

GUIDED PRACTICE

A frog (f) has 4 legs (l).
How many legs will:

- 1) 1 frog have?
- 2) 2 frogs have?
- 3) 3 frogs have?
- 4) 4 frogs have?
- 5) 100 frogs have?
- 6) f frogs have?

Function machine:



INTELLIGENT PRACTICE



A bracelet (b) needs 6 shells (s) on it.
How many shells do I need for:

1) 1 bracelet

$$1 \times 6 =$$

2) 2 bracelets

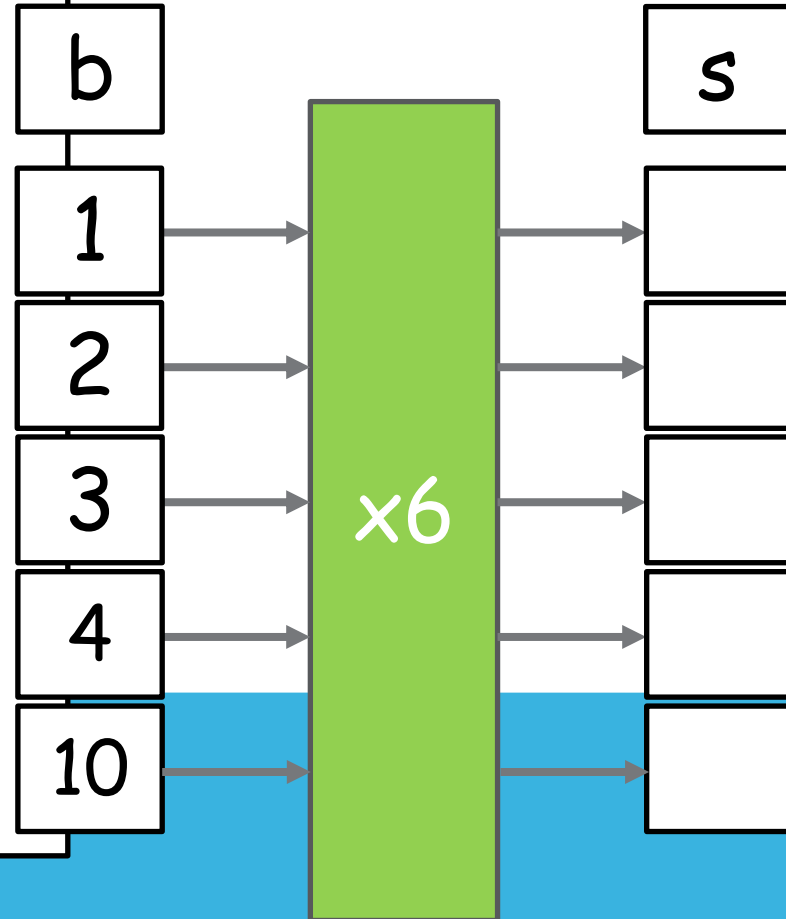
3) 3 bracelets

4) 4 bracelets

5) 10 bracelets

6) b bracelets

Function machine:



INTELLIGENT PRACTICE



A necklace (n) needs 30cm of red string (r).

How many centimetres of string do I need for:

1) 1 necklace

$$1 \times 30\text{cm} =$$

2) 2 necklaces

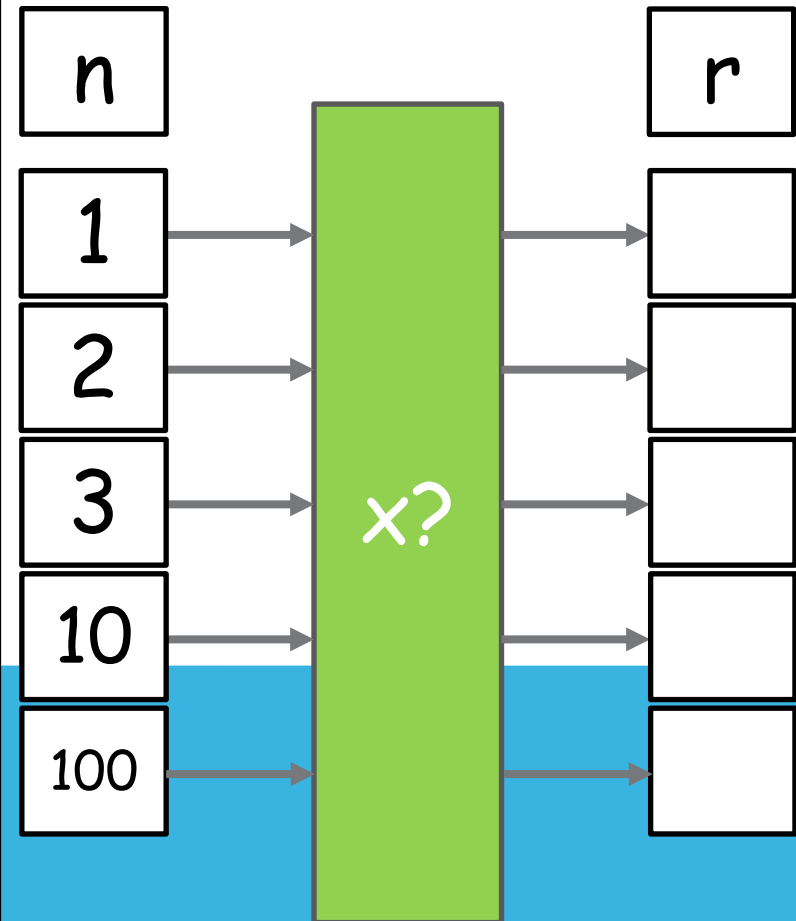
3) 3 necklaces

4) 10 necklaces

5) 100 necklaces

6) n necklaces

Function machine:



INTELLIGENT PRACTICE



Tickets (t) for the school fayre cost £7 each.

How much money would I have made after selling:

1) 4 tickets

2) 8 tickets

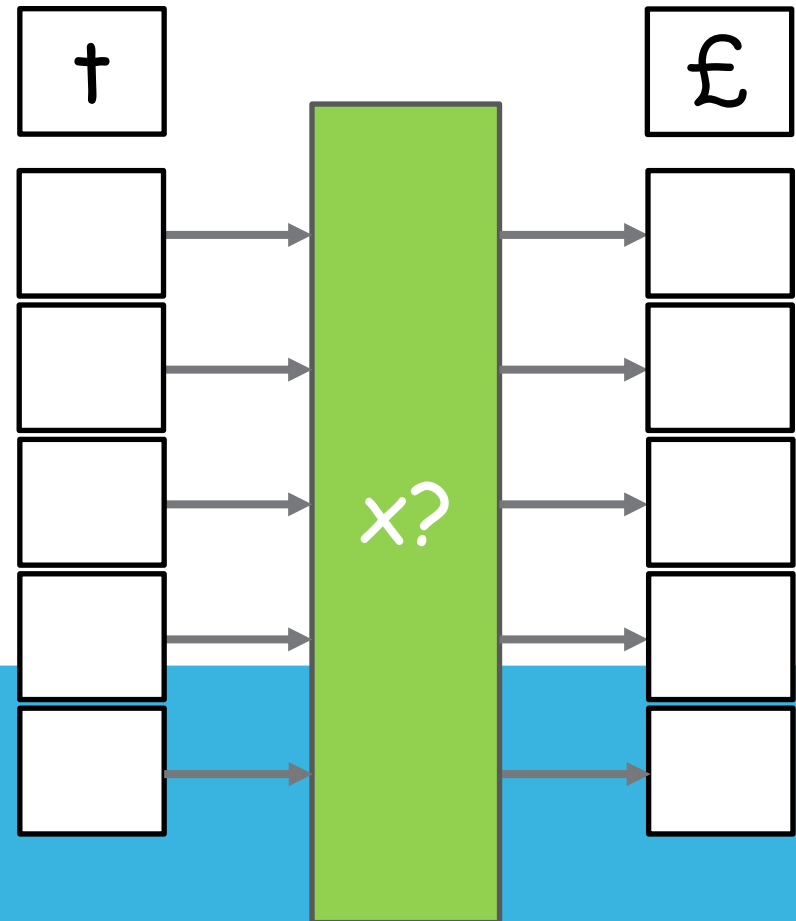
3) 12 tickets

4) 40 tickets

5) 80 tickets

6) 120 tickets

Function machine:



DIVE DEEPER 1

1) Reena makes fairy cakes. Each cake has 3 stars on top.

a) Copy and complete the table and the sentence:

Number of cakes (c)	Number of stars (s)
1	
2	
3	
4	
5	
10	
100	
1500	
c	

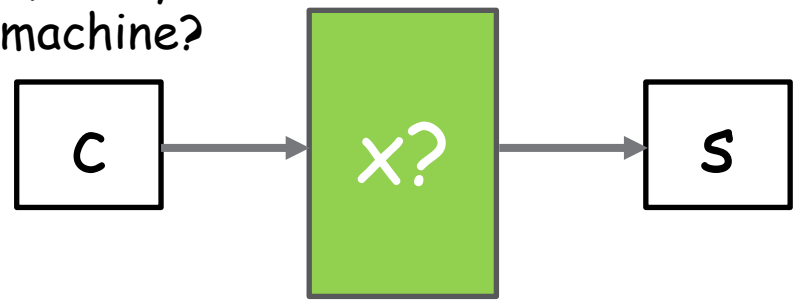
b) The rule you need to use is:
multiply the number of cakes by
to find the number of stars.

c) Complete the sentence:

For c fairy cakes, you need:

$c \times$ stars.

d) Can you create a function machine?



DIVE DEEPER 2

2a) This is a table for Ebo's cakes and the number of grapes he uses for each cake:

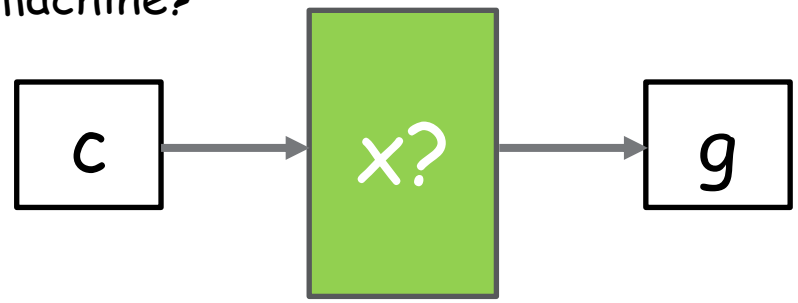
Number of cakes (c)	Rule	Number of grapes (g)
5	<input type="text"/>	25
6		30
7		35
12		<input type="text"/>
20		<input type="text"/>
<input type="text"/>		505
c		<input type="text"/>

b) The rule you need to use is: multiply the number of cakes by to find the number of grapes.

c) Complete the sentence:
For c cakes, you need:

$c \times$ grapes.

d) Can you create a function machine?



DIVE DEEPER 3

4) Copy and complete

Number of ants	1	2	5			16
Number of legs		12		18	24	

Create a function machine.

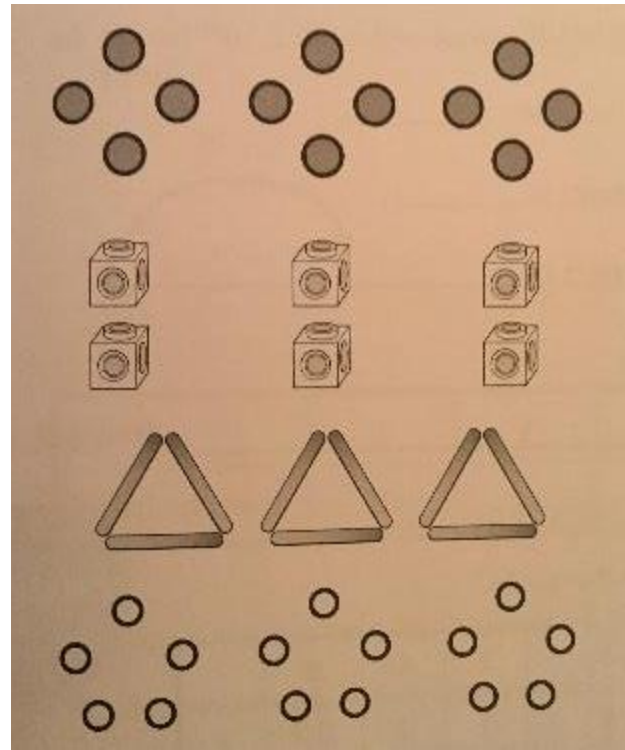
5) Join the rules to the correct diagrams

$n \times 2$

$n \times 5$

$n \times 3$

$n \times 4$



SELF-ASSESSMENT

- Some will even explain how they can re-arrange equations to help them find the answer they want
 - Some will begin using letters to represent unknowns
 - Most will explain a sequence in words
 - All will continue sequences using a table
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