Starter: Multiply these numbers by 10

46

15

34

74

27.04.21

LO: To scale up or down

Today, we are going to be scaling using bar models.

I DO:

Kiran draws a bar model to compare the lengths of two different animals' tails.

harvest mouse | 6cm |

rat | 6cm | 6cm | 6cm |



Complete the missing information:

The rat's tail is three times longer than the tail of the harvest mouse.

The harvest mouse's tail is 6cm long.

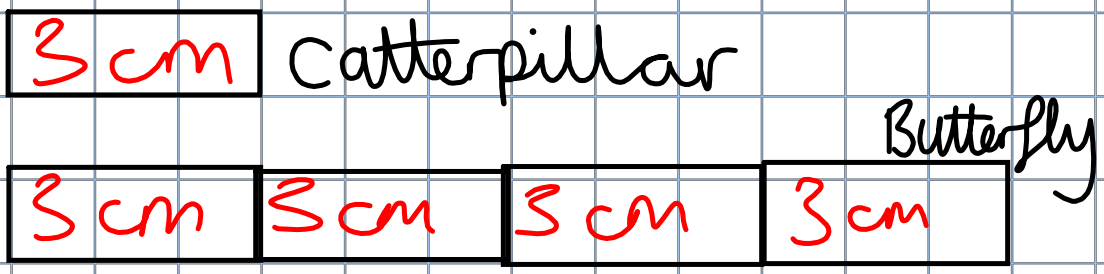
6 × 3 = 18

The rat's tail is 18cm long.



WE DO:

A caterpillar is 3cm long. When it becomes a butterfly, it is 4 times as big. Draw a bar model to show this and to calculate the answer.



$3 \times 4 = 12$

The butterfly is 12 cm long.

YOU DO:

Scaling questions:

1. An adult giraffe's leg is three times as long as a baby giraffe's leg. An adult giraffe's leg is 180cm long.



Use the bar model to calculate how long a baby giraffe's leg is .



2. A yellow bird's wingspan is 30cm. A blue bird's wingspan is 4 times as long. How long is the blue bird's wingspan?
3. A car is 3m long. The lorry that is taking the cars to the shop is 8 times as long. How long is the lorry?
4. Choose three number cards from below to complete the sentence:

20	4	6	5

_____ is _____ times bigger than _____.

Challenge:

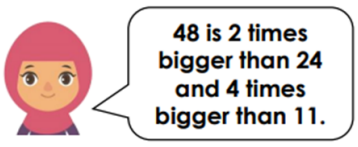
I am thinking of a number.

It is 8 times smaller than 56.

What number am I thinking of?

?

56



Explain the mistake that she has made.

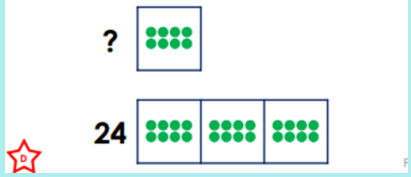
I am thinking of a number.

It is 3 times smaller than 24.

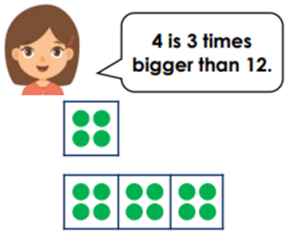
What number am I thinking of?

?

24



2a. Mia says,



Explain the mistake that she has made.