## Lesson 3- Fractions

## What do you need?

Pen and Paper

| Blue Zone <br> Going slow | Green Zone <br> Good to go | Yellow Zone <br> Caution <br> Starting to lose control | Red Zone <br> Stop! Out of control |
| :---: | :---: | :---: | :---: |
| E.g. sad, sick, tired, bored | E.g. happy, calm, focused, ok | E.g. worried, excited, annoyed | E.g. angry, terrified, elated |
|  |  |  |  |



To find $1 / 2$, we must divide by 2 .
We have split our original into two.

## Finding Half (1/2)

To find half of a number, you need to divide the number by two.


$$
6 \div 2=3 \quad \text { so } \quad 1 / 2 \text { of } 6=3
$$

Finding Half (1/2)
Can you find $1 / 2$ ?

$$
1 / 2 \text { of } 8=4 \quad 8 \div 2=4
$$



So half of 8 is 4


## Finding Half (1/2)

Amina has 4 pencils, she wants to put half of them in her pencil case. How many pencils will she put in her pencil case?

$$
1 / 2 \text { of } 4=2 \quad 4 \div 2=2
$$




## So half of 4 is 2

She will put 2 pencils in her pencil case.


Finding Half ( $1 / 2$ )
Liam has ten sweets, he gives half to his sister. How many sweets will they each get?


So half of 10 is 5
They will get 5 sweets each.


|  |  |  |  |
| :---: | :---: | :---: | :---: |
| $\frac{1}{4}$ | $\frac{1}{4}$ | $\frac{1}{4}$ | $\frac{1}{4}$ |
|  |  |  |  |

To find $\frac{1}{4}$, we must divide by 4 .
We have split our original into 4 equal parts.

## Finding a Quarter (1/4)

To find a quarter of a number, you need to divide the number by four.


$$
8 \div 4=2 \quad \text { so } \quad 1 / 4 \text { of } 8=2
$$

Finding a Quarter (1/4)

Can you find $1 / 4$ ?

$$
1 / 4 \text { of } 4=1 \quad 4 \div 4=1
$$



So a quarter of 4 is 1


## Finding a Quarter (1/4)

A cat has 12 fish. It shares them between her four kittens. How many fish will each kitten get.

$$
1 / 4 \text { of } 12=4 \quad 12 \div 4=3
$$

So a quarter of 12 is 3
They will get 3 fish each.


## Finding One Third (1/3)

We divide by 2 to find half $(1 / 2)$, and 4 to find one quarter $(1 / 4)$.

What do you think we need to divide by to find one third?
Have a look at the one third fraction...



To find $\frac{1}{3}$, we must divide by 3 .
We have split our original into 3 equal parts.

## Finding One Third (1/3)

To find one third of a number, you need to
divide the number by three.


$$
6 \div 3=2 \quad \text { so } \quad 1 / 3 \text { of } 6=2
$$

Finding One Third (1/3)
Can you find $1 / 3$ ?

## $1 / 3$ of $9=3$ <br> $9 \div 3=3$ <br>  <br> So one third of 9 is 3 <br> 

## Finding One Third (1/3)

There are 12 dog biscuits in a packet. Daniel shares them between his three dogs. How many biscuits will each dog get?

$$
1 / 3 \text { of } 12=4 \quad 12 \div 3=4
$$



So one third of 12 is 4
They will get 4 biscuits each.


## Challenge time!

What do you think we would divide by to find $\frac{1}{5}$ ?

What do you think we would divide by to find $\frac{1}{8}$ ?

What do you think we would divide by to find $\frac{1}{10}$ ?

What's the pattern?

## Your turn!

Calculate the following fractions of amounts;

1) $\frac{1}{3}$ of $15=$
2) $\frac{1}{5}$ of $20=$
3) $\frac{1}{10}$ of $30=$
4) $\frac{1}{4}$ of $24=$
5) $\frac{1}{6}$ of $18=$
6) $\frac{1}{2}$ of $40=$
7) $\frac{1}{9}$ of $18=$
8) $\frac{1}{3}$ of $27=$
9) $\frac{1}{5}$ of $25=$
10) $\frac{1}{3}$ of $21=$
11) $\frac{1}{4}$ of $32=$
12) $\frac{1}{2}$ of $100=$

Traffic light your work today.

Thumbs down-I don't understand it
Thumbs across- I understand some of it
Thumbs up- I understand all of it

