

Maths

Multiplication and Division

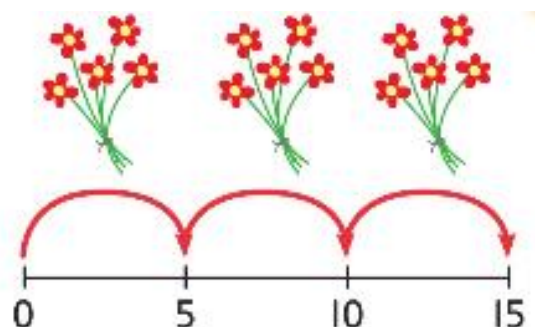
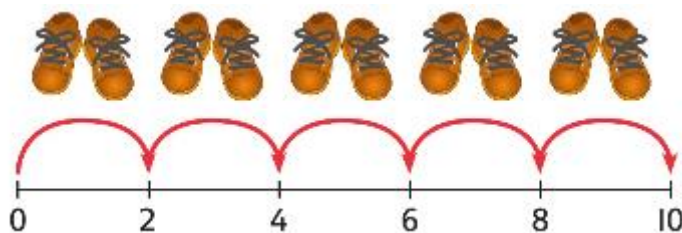
Multiplication.

Practice counting in 2s, 5s and 10s. Start by doing this practically with different objects e.g. pairs of shoes. You could march and chant as you practice counting.

Use your 100 square to help you, showing the different patterns you make by counting in 2s , 5s and 10s.

1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50
51	52	53	54	55	56	57	58	59	60
61	62	63	64	65	66	67	68	69	70
71	72	73	74	75	76	77	78	79	80
81	82	83	84	85	86	87	88	89	90
91	92	93	94	95	96	97	98	99	100

Practice skip counting using your whiteboard to write out your number line e.g.

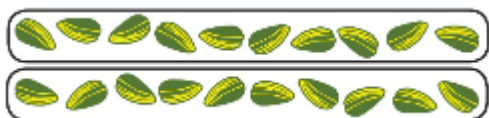


Language to practice for this unit.

groups of, lots of, double, array, skip counting, row, column, repeated addition, multiplication.

Grouping objects using arrays.

Arrange items into groups using an array (arranging the objects in equal rows and columns) to make counting them easier e.g.



There are 10 seeds in each row. There are 2 rows. How many are there altogether? We can count in 10s.



There are 5 seeds in each column. There are 4 columns. How many are there altogether? We can count in 5s.

These are called arrays.

Can you complete the sentences below for each array?

a)



b)



c)



There are columns.

There are counters in each column.

There are counters in the array.

Repeated Addition

Adding equal groups together is the next step to multiplication. E.g.

We are learning to add equal groups.



There are pairs of shoes.

There are shoes in each pair.



$$2 + 2 + 2 + 2 + 2 =$$

There are shoes altogether.

We can say that there are 5 groups of 2. There are _____ altogether.

Multiplication X sign

Make the sign with your hands, draw it on your whiteboard. A quicker way of writing repeated addition is to use the X sign.

5 groups of 2 is the same as (equals) 10 can be written as $5 \times 2 = 10$

Try this with the following challenge:

There are _____ apples on each plate.

There are _____ apples altogether.



$$\square + \square + \square = \square$$

3 groups of 2 is the same as

$$3 \times 2 = \square$$

Division

Language to practice for this unit.

sharing, groups, equally, between.

Practice sharing a total equally into groups e.g. six bananas between 3 children, how many would they have each?

This is best done practically. Share counters, food items, pencils between groups to demonstrate. How many does each group have?

When doing this be careful with the items you use to ensure they can be divided equally into the number of groups. Try and encourage use of mathematical language when working. E.g. If we share 12 sweets between 3 children they will have 4 sweets each.

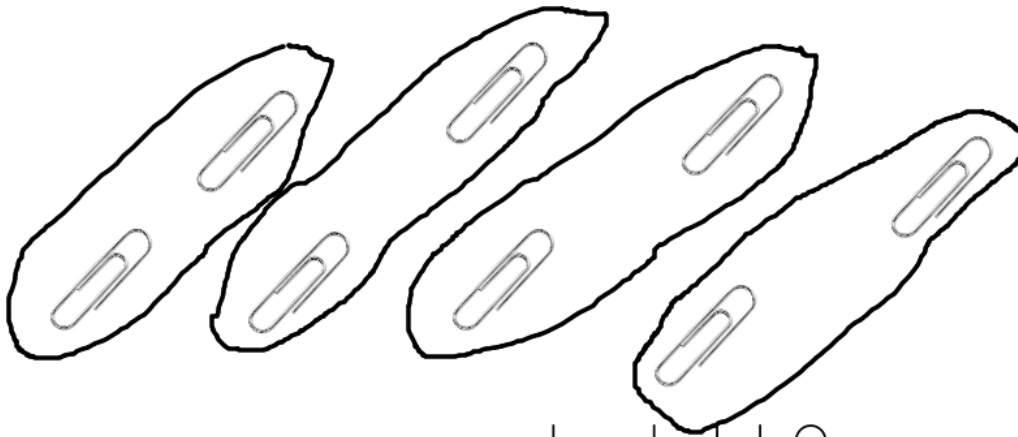
Once you have done this practically you can try drawing it on your whiteboards using circles to represent the groups. E.g.

Mrs Jones wants to share
12 bananas between 4
children. How many will
each child get?



You can also investigate how many groups you would need to share a number of items equally. If I had 16 pencils and each child needs 4 pencils, how many children are there? Again do this practically grouping the items in 4s to work out how many groups (children) you have. E.g.

I have 8 paper clips.



I want to give each child 2 paper clips. How many children will get them?

Fractions

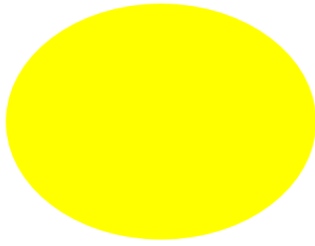
Language to practice for this unit.

whole, parts, equal, fractions, half, halves, quarter, quarters.

Fractions are equal parts of a whole. Pizzas and cakes are great ways to practically explain fractions. In Year 1 we start fractions by talking about halves and quarters.

One Whole

A whole is a single unit or a number of things viewed as a 'set'.

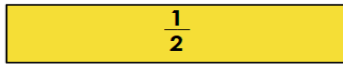


Show items to emphasise 'whole' as 1 rather than a hole.

A whole can be split into *two equal parts*

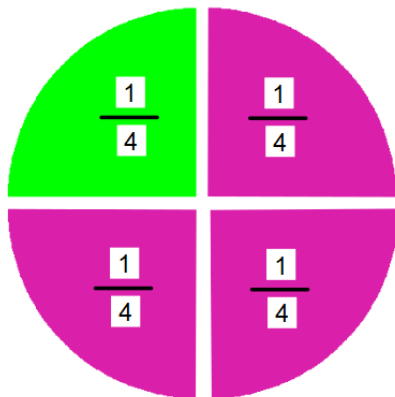
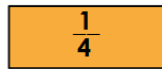
Half

This can be modelled with fruit really well.



Quarter

If you split a whole into 4 equal parts it is called a quarter.



You can practice your fractions with the following fun activities:

Let's take a look at each fraction

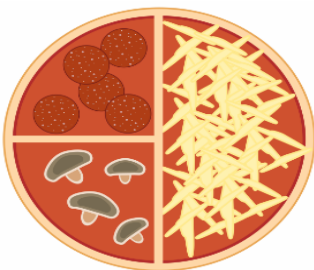
*Cut out the square. Fold it in half. Cut down the fold.
Label the fractions.*

*Cut out the square. Fold it in half, then half again to
make quarters. Cut down the folds. Label the fractions.*

*Cut out the circle. Fold it in half. Cut down the fold.
Label the fractions.*

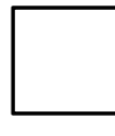
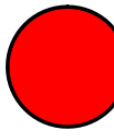
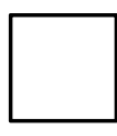
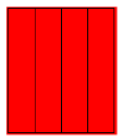
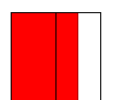
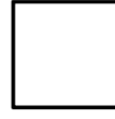
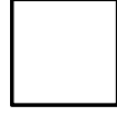
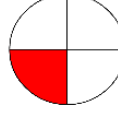
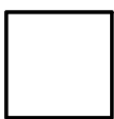
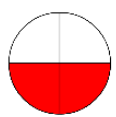
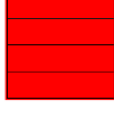
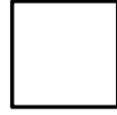
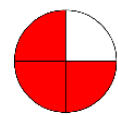
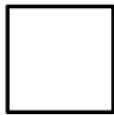
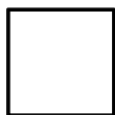
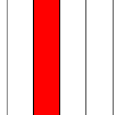
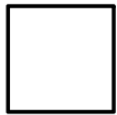
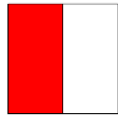
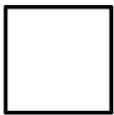
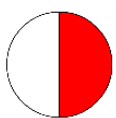
*Cut out the circle. Fold it in half, then half again to
make quarters. Cut down the folds. Label the fractions.*

*Can you design a pizza and split the
toppings into different fractions?*



*My pizza is half cheese,
a quarter mushroom and a
quarter pepperoni.*

What fraction is shaded?



Useful Websites:

<https://www.ictgames.com/mobilePage/duckShoot/index.html>

<https://www.ictgames.com/mobilePage/doggyDivision/index.html>

<https://www.bbc.co.uk/bitesize/topics/z3rbg82> (Fractions)

<https://www.bbc.co.uk/bitesize/topics/zqbg87h> (Multiplication and Division)