

Lesson 7 – Recognise a Third

NC Objective:
recognise, find, name and write fractions $\frac{1}{3}$, $\frac{1}{4}$, $\frac{1}{2}$, $\frac{3}{4}$ of a length, shape, set of objects or quantity

Resources needed:
Worksheet
Teaching Slides
Objects e.g. cubes, for support

Vocabulary:
Whole, part, half, quarter, third, quantity, equal, unequal, more, less

Children will be learning to recognise one third. They will compare the difference between a third with one half and one quarter. Children will solve problems related to thirds of shapes and quantities.

Key questions:

How many equal parts have you split the whole into when you split it into thirds? In $\frac{1}{3}$ what does the digit '1' represent?

What does the digit '3' represent? Can you shade $\frac{1}{3}$ in a different way? How do you know you have shaded $\frac{1}{3}$?

How many thirds make a whole?

★ Working Towards

Which two shapes have been divided into thirds (3 equal parts)?

☐ ☐ ☐

Draw 2 more lines to split the pizza into thirds.

Shade $\frac{1}{3}$ of this shape:

One third can be written as .

Put these numbers in the correct places: 3 2 4

There are equal halves in one whole.

There are equal quarters in one whole.

There are equal thirds in one whole.

Only $\frac{1}{3}$ of a rectangle has been drawn. Draw the rest of the shape:

★★ Working Within

Which two shapes have been divided into thirds?

☐ ☐ ☐

Draw lines to split the pizza into thirds.

Shade $\frac{1}{3}$ of this shape:

One can be written as .

Complete these sentences:

There are equal halves in one whole.

There are equal quarters in one whole.

There are equal thirds in one whole.

Only $\frac{1}{3}$ of a shape has been drawn. Draw the rest of the shape:

★★★ Greater Depth

Draw 3 shapes and divide them into thirds in different ways.

Is this pizza correctly divided into thirds? ☐

How do you know?

Shade $\frac{1}{3}$ of this shape:

One can be written as .

There are 3 equal thirds in one whole.

How many equal thirds are in:

2 wholes?

5 wholes?

10 wholes?

Only $\frac{1}{3}$ of a shape has been drawn. Draw the rest of the shape:

Children demonstrate knowledge of thirds by identifying shapes split into them. They practice dividing shapes into thirds and complete simple sentences with numbers to pick from to help support them.

Children demonstrate knowledge of thirds by identifying more complicated shapes split into them. They have to understand 3 equal parts. They practice dividing shapes into thirds and complete simple sentences.

Children draw their own shapes and divide them accurately into thirds. They have to understand the importance of 3 equal parts, not just 3 parts. They practice dividing shapes into thirds and completing whole shapes. They use the knowledge of one third to explain how many thirds in more than one whole.

Reasoning & Problem Solving

Zach is cutting carrots. Tick which one he has cut into thirds.

☐ ☐

Malachi built a tower that is 6 blocks tall.

How many blocks is one third of his tower?

Has Rosie cut her pizza into thirds?

How do you know?

Zach is cutting carrots. Has he cut this into thirds?

☐

How do you know?

Malachi built a tower with blocks. $\frac{1}{3}$ of his tower is 6 blocks tall. How tall is his whole tower?

Rosie said she would rather have $\frac{1}{3}$ of a pizza than 3 because 3 is bigger than 2. Draw pizzas to show where she has gone wrong.

Zach is cutting carrots. Has he cut this into thirds?

☐

How do you know?

Malachi built a tower with blocks. $\frac{1}{3}$ of his tower is 6 blocks tall. Each block is 2cm tall. How tall is his whole tower in cm?

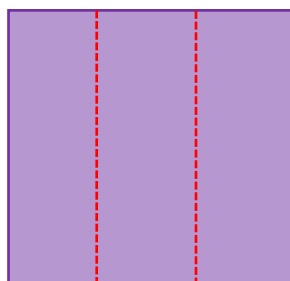
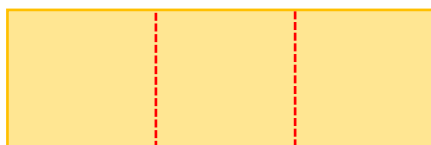
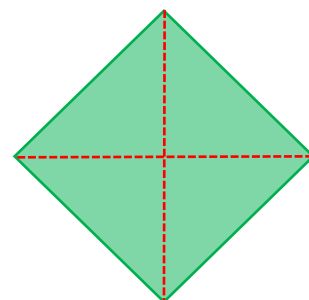
Rosie is making 3 pizzas for 9 friends. Cut them into slices so each person gets the same amount of pizza.

Children solve simple problems related to thirds and halves. They are given pictures (e.g. blocks) for support.

Children solve problems related to thirds which are more complicated, such as using drawings to explain how mistakes have been made.

Children solve complicated problems showing a secure understanding of thirds, including a multi-step problem with Malachi's tower.

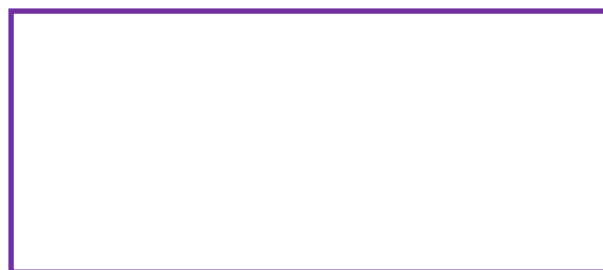
Which two shapes have been divided into thirds (3 equal parts)?


☐

☐

☐

Draw 2 more lines to split the pizza into thirds.



Shade $\frac{1}{3}$ of this shape:



One third can be written as .

Put these numbers in the correct places:

There are equal halves in one whole.

There are equal quarters in one whole.

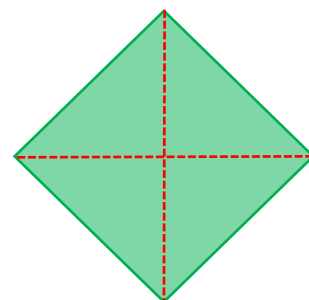
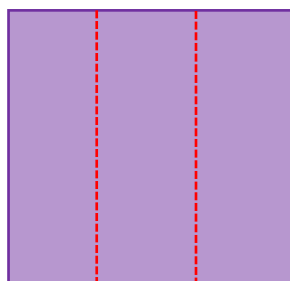
There are equal thirds in one whole.

Only $\frac{1}{3}$ of a rectangle has been drawn.
Draw the rest of the shape:





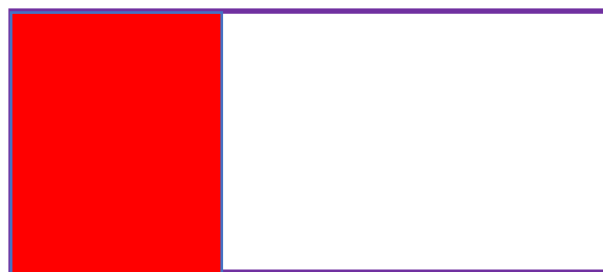
Which two shapes have been divided into thirds (3 equal parts)?



Draw 2 more lines to split the pizza into thirds.



Shade $\frac{1}{3}$ of this shape:



One possibility shown above.

One third can be written as $\frac{1}{3}$.

Put these numbers in the correct places:

3

2

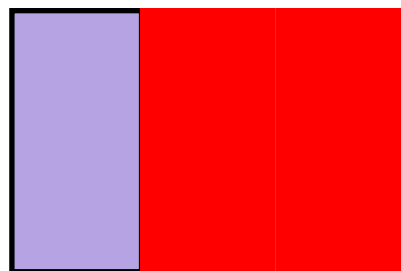
4

There are 2 equal halves in one whole.

There are 4 equal quarters in one whole.

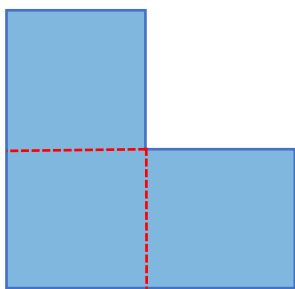
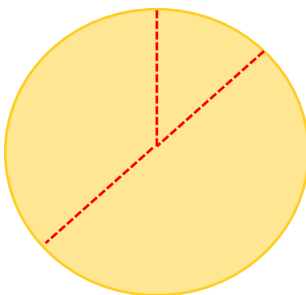
There are 3 equal thirds in one whole.

Only $\frac{1}{3}$ of a rectangle has been drawn.
Draw the rest of the shape:





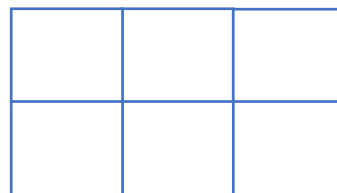
Which two shapes have been divided into thirds?

☐☐☐

Draw lines to split the pizza into thirds.



Shade $\frac{1}{3}$ of this shape:



One _____ can be written as .

Complete these sentences:

There are equal halves in one whole.

There are equal quarters in one whole.

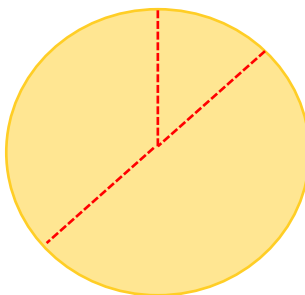
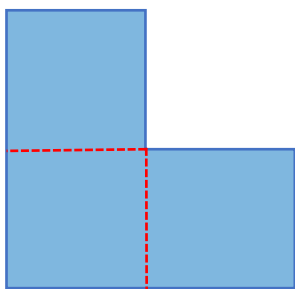
There are equal thirds in one whole.

Only $\frac{1}{3}$ of a shape has been drawn.
Draw the rest of the shape:





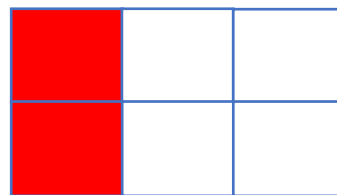
Which two shapes have been divided into thirds?



Draw lines to split the pizza into thirds.



Shade $\frac{1}{3}$ of this shape:



One possibility shown above.

One third can be written as

$\frac{1}{3}$

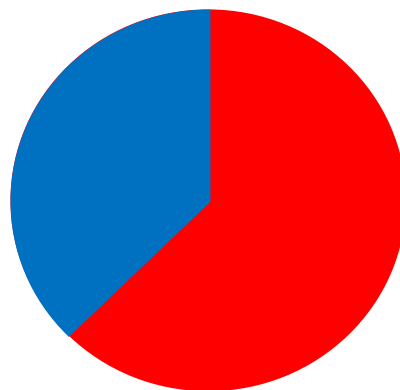
Complete these sentences:

There are 2 equal halves in one whole.

There are 4 equal quarters in one whole.

There are 3 equal thirds in one whole.

Only $\frac{1}{3}$ of a shape has been drawn.
Draw the rest of the shape:





Draw 3 shapes and divide them into thirds in different ways.


Is this pizza correctly divided into thirds?



How do you know?

Shade $\frac{1}{3}$ of this shape:



One _____ can be written as  .

There are 3 equal thirds in one whole.

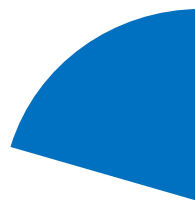
How many equal thirds are in:

2 wholes? _____

5 wholes? _____

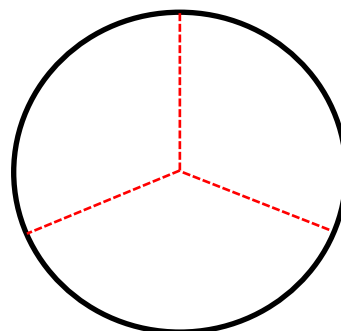
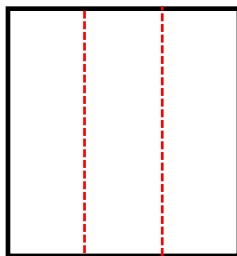
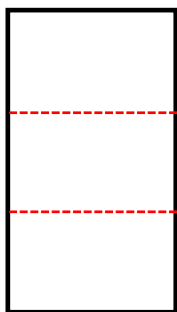
10 wholes? _____

Only $\frac{1}{3}$ of a shape has been drawn.
Draw the rest of the shape:





Draw 3 shapes and divide them into thirds in different ways.



Some possibilities shown above.

Is this pizza correctly divided into thirds?

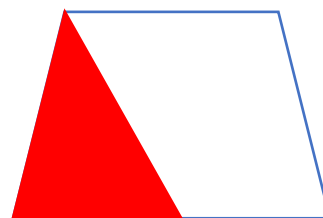


No

How do you know?

The pizza is divided into 3 pieces, but each piece is not of equal size.

Shade $\frac{1}{3}$ of this shape:



One possibility shown above.

One third can be written as

$\frac{1}{3}$

There are 3 equal thirds in one whole.

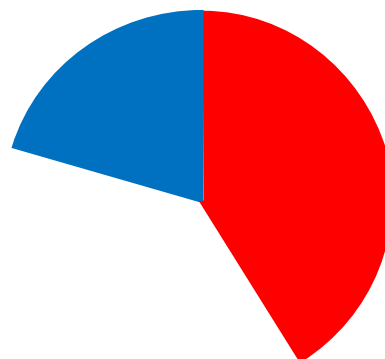
How many equal thirds are in:

2 wholes? 6

5 wholes? 15

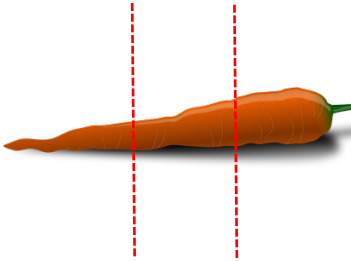
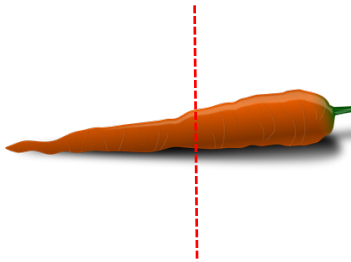
10 wholes? 30

Only $\frac{1}{3}$ of a shape has been drawn.
Draw the rest of the shape:



Zach is cutting carrots.

Tick which one he has cut into thirds:


☐

☐

Malachi built a tower that is 6 blocks tall.



Malachi



How many blocks is one third of his tower?



Rosie

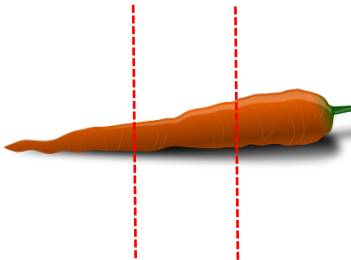
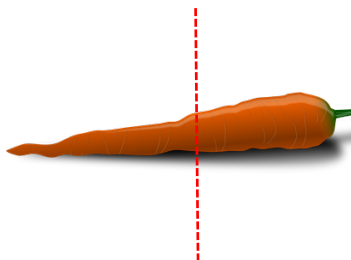


Has Rosie cut her pizza into thirds?

How do you know?

Zach is cutting carrots.

Tick which one he has cut into thirds:


☐

☐

Malachi built a tower that is 6 blocks tall.



Malachi



How many blocks is one third of his tower?



Rosie

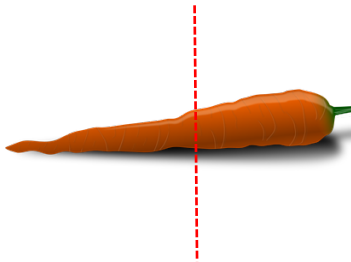
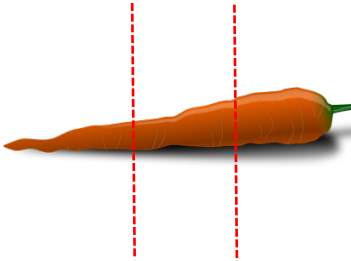


Has Rosie cut her pizza into thirds?

How do you know?

Zach is cutting carrots.

Tick which one he has cut into thirds:



Malachi built a tower that is 6 blocks tall.



Malachi



How many blocks is one third of his tower?

2



Rosie



Has Rosie cut her pizza into thirds?

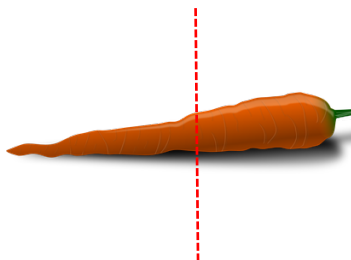
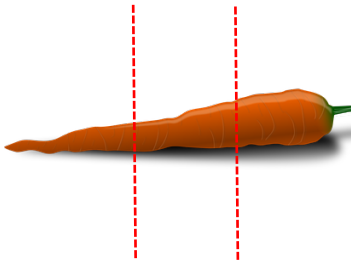
No

How do you know?

She has only cut it into 2 equal pieces, not 3.

Zach is cutting carrots.

Tick which one he has cut into thirds:



Malachi built a tower that is 6 blocks tall.



Malachi



How many blocks is one third of his tower?

2



Rosie



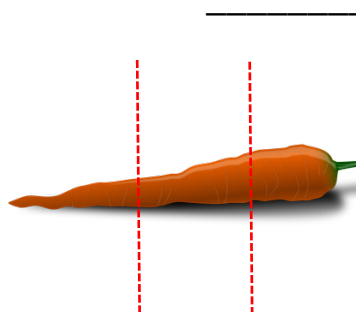
Has Rosie cut her pizza into thirds?

No

How do you know?

She has only cut it into 2 equal pieces, not 3.

Zach is cutting carrots.
Has he cut this into thirds?



How do you know?

Malachi built a tower with blocks.



Malachi

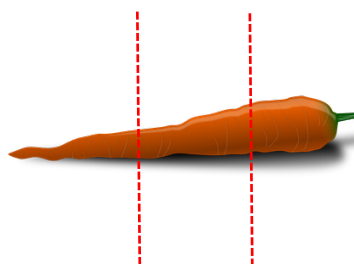


$\frac{1}{3}$ of his tower
is 6 blocks tall.
How tall is his
whole tower?

Rosie said she would rather have $\frac{1}{3}$ of a pizza
than $\frac{1}{2}$ because 3 is bigger than 2.

Draw pizzas to show where she has gone wrong.

Zach is cutting carrots.
Has he cut this into thirds?



How do you know?

Malachi built a tower with blocks.



Malachi



$\frac{1}{3}$ of his tower
is 6 blocks tall.
How tall is his
whole tower?

Rosie said she would rather have $\frac{1}{3}$ of a pizza
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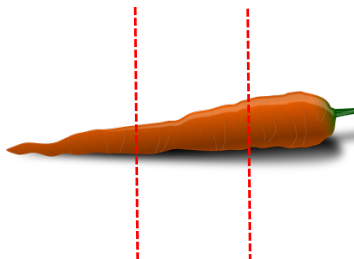
Draw pizzas to show where she has gone wrong.



Zach is cutting carrots.

Has he cut this into thirds?

Yes



How do you know?

He has cut it into 3 equal pieces.

Malachi built a tower with blocks.



Malachi



$\frac{1}{3}$ of his tower
is 6 blocks tall.
How tall is his
whole tower?

18 blocks

Rosie said she would rather have $\frac{1}{3}$ of a pizza
than $\frac{1}{2}$ because 3 is bigger than 2.

Draw pizzas to show where she has gone wrong.



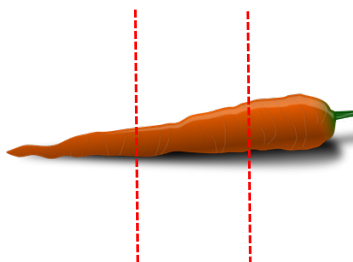
$\frac{1}{3}$ is smaller
than $\frac{1}{2}$.



Zach is cutting carrots.

Has he cut this into thirds?

Yes



How do you know?

He has cut it into 3 equal pieces.

Malachi built a tower with blocks.



Malachi



$\frac{1}{3}$ of his tower
is 6 blocks tall.
How tall is his
whole tower?

18 blocks

Rosie said she would rather have $\frac{1}{3}$ of a pizza
than $\frac{1}{2}$ because 3 is bigger than 2.

Draw pizzas to show where she has gone wrong.

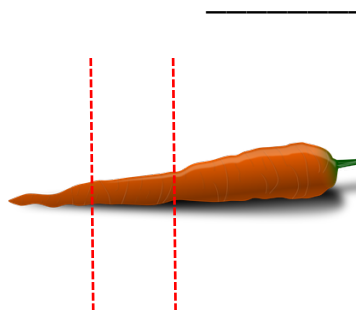


$\frac{1}{3}$ is smaller
than $\frac{1}{2}$.



Zach is cutting carrots.

Has he cut this into thirds?



How do you know?

Malachi built a tower with blocks.



Malachi



$\frac{1}{3}$ of his tower is 6 blocks tall.

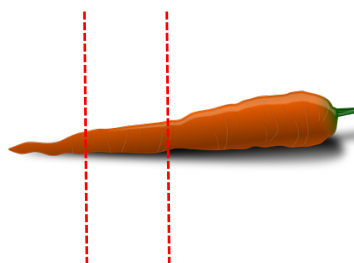
Each block is 2cm tall.
How tall is his whole tower in cm?

Rosie is making 3 pizzas for 9 friends.
Cut them into slices so each person gets the same amount of pizza.



Zach is cutting carrots.

Has he cut this into thirds?



How do you know?

Malachi built a tower with blocks.



Malachi



$\frac{1}{3}$ of his tower is 6 blocks tall.

Each block is 2cm tall.
How tall is his whole tower in cm?

Rosie is making 3 pizzas for 9 friends.
Cut them into slices so each person gets the same amount of pizza.

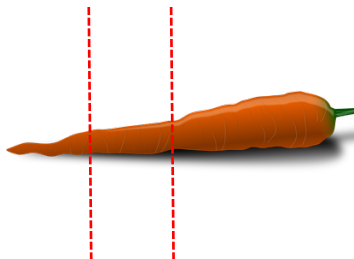




Zach is cutting carrots.

Has he cut this into thirds?

No



How do you know?

He has not cut it into equal pieces.

Malachi built a tower with blocks.



Malachi



$\frac{1}{3}$ of his tower is 6 blocks tall.

Each block is 2cm tall.
How tall is his whole tower in cm?

36cm

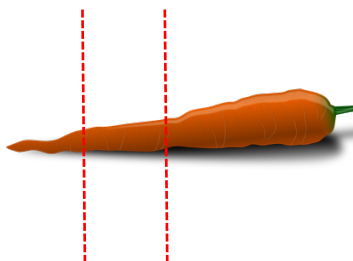
Rosie is making 3 pizzas for 9 friends.
Cut them into slices so each person gets the same amount of pizza.



Zach is cutting carrots.

Has he cut this into thirds?

No



How do you know?

He has not cut it into equal pieces.

Malachi built a tower with blocks.



Malachi



$\frac{1}{3}$ of his tower is 6 blocks tall.

Each block is 2cm tall.
How tall is his whole tower in cm?

36cm

Rosie is making 3 pizzas for 9 friends.
Cut them into slices so each person gets the same amount of pizza.

