

A close-up photograph of several green fern fronds, showing the intricate, feathery structure of the leaves. The fronds are vibrant green and appear slightly wet, with some water droplets visible. The background is dark and out of focus, emphasizing the texture and detail of the fern leaves.

RICH MATHEMATICAL TASK BOOKLET

# RATIONAL NUMBERS

## Fractions

YEAR 0

## Copy Masters

**Task 1**

Imagine you are like Mr Grinling and only have one whole thing left in your basket for you and Hamish to eat for lunch. Show what you would do so Hamish does not meow at you for eating more than him?

*Year 0 Copy Masters: Fractions*

**Task 1 (independent)**

Use playdough balls of different sizes and shapes to explore equal sharing

Draw a picture of how you shared one playdough shape between two (or more) friends

**Task 2**

Mrs Grinling shares one bottle of juice with Mr Grinling. They have the same amount each. How much does Mr Grinling drink? How much does Mrs Grinling drink?

**Task 2 (independent)**

Use different sized and shaped containers that can be filled with water or sand.

Select one container and fill it with water. Pour out half of the water. How much water is left?

Do the same with a different sized container. What do you notice?

Draw a picture to record your actions. Show where half is on each container.

**Task 3**

1. Mr Grinling had two whole sandwiches. The seagulls stole one sandwich out of his lunch basket. If Mr Grinling shares his sandwich with Hamish the cat, how much would they each get?
  
2. Mrs Grinling put one sandwich in the basket for Mr Grinling's lunch. If a seagull steals half of the sandwich to eat – how much will Mr Grinling have left for his lunch?

**Task 3 (independent)**

Draw a shape. If the shape is cut into two halves, what might it look like?

Draw another shape, if the shape is cut into two halves, what might it look like?

**Task 4**

Mrs Grinling has three filled bread rolls. She sends half of these over in the basket to Mr Grinling to have for his lunch and she eats the rest. How much of the three filled bread rolls does she eat and how much does Mr Grinling eat?



**Task 4 (independent)**

Fold different sized pieces of paper “in half”. What do you notice?

Put together cut up halves of paper so they make one whole. What do you notice?

**Task 5**

For a change Mrs Grinling puts five sausages in the basket for Mr Grinling and Hamish to have for lunch. They share them equally. How much do they each get to eat?

For a change Mrs Grinling puts seven sausages in the basket for Mr Grinling and Hamish to have for lunch. They share them equally. How much do they each get to eat?

*Year 0 Copy Masters: Fractions*

**Task 5 (independent)**

Roll six playdough sausages.

Cut each sausage in half.

What do you notice?

Count the halves. How many halves are there?

Draw a picture of your sausages and show where half is on each sausage.

**Task 6**

Mrs Grinling has one bottle of juice left in her refrigerator. Every day she sends half a bottle of juice across to Mr Grinling to drink at lunch time. How many days can she send juice over to Mr Grinling?

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**Task 6 (independent)**

Mum brings five muffins home from work and says all three of you can share the muffins.

How much does each person get?

Draw a picture to record your thinking.

**Task 7**

If Mr Grinling eats 5 half sandwiches and the seagulls eat three whole sandwiches, who do you think ate more? Why?

Mrs Grinling makes some small meat pies.

Mrs Grinling eats one whole pie. Hamish eats three half pies. Mr Grinling eats two half pies.

Who do you think ate more? Why?

*Year 0 Copy Masters: Fractions***Task 7 (independent)**

Fill two different sized boxes with cubes or blocks until they are half full.

What do you notice?

Record your measurement by drawing the two different sized boxes and marking where half full is.

**Task 8**

Mrs Grinling has baked a small chocolate cake. She shares the cake with three of her friends. How much do they each get?



**Task 8 (independent)**

Fill one container with water until it is full.

Pour all of the water into a different sized container.

What do you notice?

Why do you think that is?

*Year 0 Copy Masters: Fractions***Task 9**

Mr Grinling is sharing a bag of marshmallows with Mrs Grinling.

The bag has 6 marshmallows.

They each get half the bag so how many marshmallows do they get?

Mr Grinling is sharing a bag of jelly-beans with Mrs Grinling.

The bag has 10 jelly-beans.

They each get half the bag so how many jelly-beans do they get?

Mr Grinling is sharing a bag of jet-planes with Mrs Grinling.

The bag has 8 jet-planes.

They each get half the bag so how many jet-planes do they get?

**Task 9 (independent)**

Mr Grinling has some bags of marbles.

There are 4 marbles in a bag. One half of the marbles are blue. How many marbles are blue?

There are 8 marbles in a bag. One half of the marbles are red. How many marbles are red?

There are 6 marbles in a bag. One half of the marbles are green. How many marbles are green?

There are 10 marbles in a bag. One half of the marbles are yellow. How many marbles are yellow?

**Task 10**

The Grinlings are celebrating Mrs Grinling's birthday.

Mr Grinling bakes a cake and has 12 M&Ms to decorate the cake.

Mr Grinling cut the cake in two and shared the M&Ms equally.

What fraction of the M&Ms would there be on each side?

How many M&Ms would be on each side?

Mr Grinling bakes a cake and has 12 M&Ms to decorate the cake.

Mr Grinling cut the cake in four and shared the M&Ms equally.

What fraction of the M&Ms would there be on each side?

How many M&Ms would be on each side?

**Task 10 (independent)**

The Grinlings are celebrating Mrs Grinling's birthday.

Mr Grinling bakes a cake and has 8 M&Ms to decorate the cake.

Mr Grinling cut the cake in two and shared the M&Ms equally.

What fraction of the M&Ms would there be on each side?

How many M&Ms would be on each side?

Mr Grinling bakes a cake and has 8 M&Ms to decorate the cake.

Mr Grinling cut the cake in four and shared the M&Ms equally.

What fraction of the M&Ms would there be on each side?

**Task 11**

Mrs Grinling has made two whole pies for their lunch. She eats one half of a pie, and she sends one whole pie and a half pie over to Mr Grinling to share with Hamish. They both eat the same amount.

How much do they each eat?

**Task 11 (independent)**

Roll playdough into two shapes that are the same size.

Cut the first shape in half. How many pieces of playdough do you have now?

Draw both playdough shapes recording what you notice.

**Task 12**

If Hamish eats two quarters of a ham sandwich and Mr Grinling eats half a ham sandwich, who eats more? How do you know?

If Hamish eats one quarter of a ham sandwich and Mr Grinling eats half a ham sandwich, who eats more? How do you know?

If Hamish eats four quarters of a ham sandwich and Mr Grinling eats a whole ham sandwich, who eats more? How do you know?