

DEVELOPING MATHEMATICAL INQUIRY COMMUNITIES

Level 0 (NE / Year 0)

Copy Masters

Number: Fractions

Task 1 – Group Tasks

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?

Task 1 – Independent Tasks

How could you share this fairly with your friends?

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

Task 2 – Group Tasks

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 Tasks

Choose one container and fill it up 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 – Group Tasks

Mr Grinling had two whole sandwiches. The seagulls stole one sandwich out of his lunch basket. Mr Grinling shares what is left equally with Hamish the cat.

How much do they each get?

Mrs Grinling put one sandwich in the basket for Mr Grinling's lunch. A naughty seagull steals half of the sandwich.

How much does Mr Grinling have left for his lunch?

Task 3 – Independent Tasks

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 – Group Tasks

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 Tasks

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 – Group Tasks

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?

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?

Task 5 – Independent Tasks

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.

Now choose your own number of sausages to make. Cut them all in half and record what you notice.

Task 6 – Group Tasks

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 Tasks

Mum brings six muffins home from work and says four people can share the muffins.

How much does each person get?

Draw a picture to record your thinking.

Task 7 – Group Tasks

Mr Grinling eats 5 half sandwiches.

The seagulls eat three whole sandwiches.

Who do you think ate more? Why?

Task 7 – Independent Tasks

Fill two different sized boxes with cubes or blocks until they are half full. Record how many cubes or blocks you used.

What do you notice?

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

Task 8 – Group Tasks

Mrs Grinling makes some meat pies.

Mrs Grinling eats one whole pie.

Hamish eats three half pies.

Mr Grinling eats two half pies.

Who ate the most?

Who ate the least?

Task 8 – Independent Tasks

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

What do you notice?

If you tip the cubes or blocks from one box into the other box, is the second box full, or not?

Why do you think that is?

Task 9 – Group Tasks

Mrs Grinling has baked banana loaf. She shares the banana loaf with three of her friends.

How much do they each get?

Task 9 – Independent Tasks

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?

Task 10 – Group Tasks

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

How much do they each eat?

Task 10 – Independent Tasks

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.

Roll playdough into two shapes that are the same size.

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

Draw both playdough shapes recording what you notice.

Task 11 – Group Tasks

Hamish eats two quarters of a ham sandwich. Mr Grinling eats half a ham sandwich.

Who eats more? How do you know?

Hamish eats one quarter of a ham sandwich. Mr Grinling eats half a ham sandwich.

Who eats more? How do you know?

Hamish eats four quarters of a ham sandwich. Mr Grinling eats a whole ham sandwich.

Who eats more? How do you know?

Task 11 – Independent Tasks

Draw and record all the different ways you can divide squares into parts that are the same size?

Task 12 – Group Tasks

Mr Grinling has a party with the other lighthouse keepers.
Mrs Grinling bakes a banana loaf for it. There are eight
people altogether to share the loaf.
How much do they each get?

What about if there were four people altogether.
How much do they each get?

Who would get the most?

Task 12 – Independent Tasks

Mrs Grinling made some sandwiches.

Hamish ate two quarters.

Mrs Grinling ate three halves.

Mr Grinling ate one whole.

The seagulls ate two eighths.

Put it in order from who ate the most to the least.

Task 13 – Group Tasks

At the lighthouse keepers party, they have nine liquorice straps. Mrs Grinling shares the straps equally with 8 people including herself.

How much do they each get to eat?

Task 13 – Independent Tasks

Roll three playdough sausages.

Cut the first sausage into halves.

Cut the second sausage into quarters.

Cut the third sausage into eighths.

Now mix up the pieces from each sausage and re-make your sausages so that they are all whole. Use different fraction sizes to build each sausage.

How many different ways can you make up one sausage?

How many different ways can you make up two sausages?

How many different ways can you make up three sausages?

Draw and record two different ways you made up one sausage.

Task 14 – Group Tasks

Mr Grinling ate one quarter of a liquorice strap.
Mrs Grinling ate two eighths of a liquorice strap.
Who ate the most? Why?

Mr Grinling ate one half of a liquorice strap.
Mrs Grinling ate two eighths of a liquorice strap.
Who ate the most? Why?

Mr Grinling ate one half of a liquorice strap.
Mrs Grinling ate four eighths of a liquorice strap.
Who ate the most? Why?

Task 14 – Independent Tasks

Mr Grinling ate three eighths of a liquorice strap.
Mrs Grinling ate two quarters of a liquorice strap.
Who ate the most? Why?

Mr Grinling ate three quarters of a liquorice strap.
Mrs Grinling ate two halves of a liquorice strap.
Who ate the most? Why?

Mr Grinling ate five eighths of a liquorice strap.
Mrs Grinling ate one half of a liquorice strap.
Who ate the most? Why?

Task 15 – Group Tasks

Mr and Mrs Grinling and Hamish shared a bottle of milk.

Hamish drank an eighth of the bottle.

Mr Grinling drank three eighths of the bottle.

Mrs Grinling drank the rest.

How much did she drink? Who drank the most?