DEVELOPING MATHEMATICAL INQUIRY COMMUNITIES

Level 0 (NE / Year 0)

Copy Masters

Measurement: Mass, Volume, and Capacity

Task 1

Look at these balloons I have collected. I need you to work out which balloon takes up the most space.

Task 2

Mele's Dad wants her to pack these tins of food into a box to send to their family in Tonga. She has two boxes. How many can she fit in each box and still shut the top?

Task 3

Georgia would like to choose a box to decorate for her treasures. She would like the box with the biggest volume.

Can you use the material to work out which box has the biggest volume?

Task 4

Teremoana has made some donuts. Her little brother wonders which is the biggest donut. What would you tell him?

Task 5

Look at the containers.

Which container would hold the greatest volume?

Which container would hold the least volume?

Now test and prove your idea using water.

Task 6

Look at the containers.

Which container would hold the greatest volume?

Which container would hold the least volume?

Now test and prove your idea using water and the measuring tool.

Task 7

Choose two containers and pick them up.

What do you notice about their volume?

Which has the greater volume?

What do you notice about their mass?

Which is heavier and which is lighter?

Task 8

Use the balance scale to weigh the objects

Can you find some objects that have the same mass?

Can you find some objects that have less mass?

Can you find some objects that have more mass?

Task 9

Have a look at this set of objects.

Can you find pairs of objects that have the same mass but different volume?

Can you find pairs of objects that have the same volume but different mass?

Task 10

Tasi has two loaves of bread that have the same mass. Her Dad cuts one of the loaves into two pieces. She thinks the loaf cut into two pieces will have a greater mass.

Do you agree with Tasi?

Cut one of your loaves of bread and use your balance scales to see if the mass stays the same or changes.

Try cutting the loaves in different ways and see if the mass changes or if it always stays the same.

What do you notice?

Task 11

Choose a set of the objects to measure.

Now use the teddies to measure the mass. Record what you have found out.

Now use the cubes to measure the mass. Record what you have found out.

Put the set of objects in order from the smallest mass to the greatest mass.

Task 12

The post office needs your help to work out the mass of the parcels.

Can you use the cubes to work out the mass of each parcel?