RICH MATHEMATICAL TASK BOOKLET

MEASUREMENT

YEAR 1

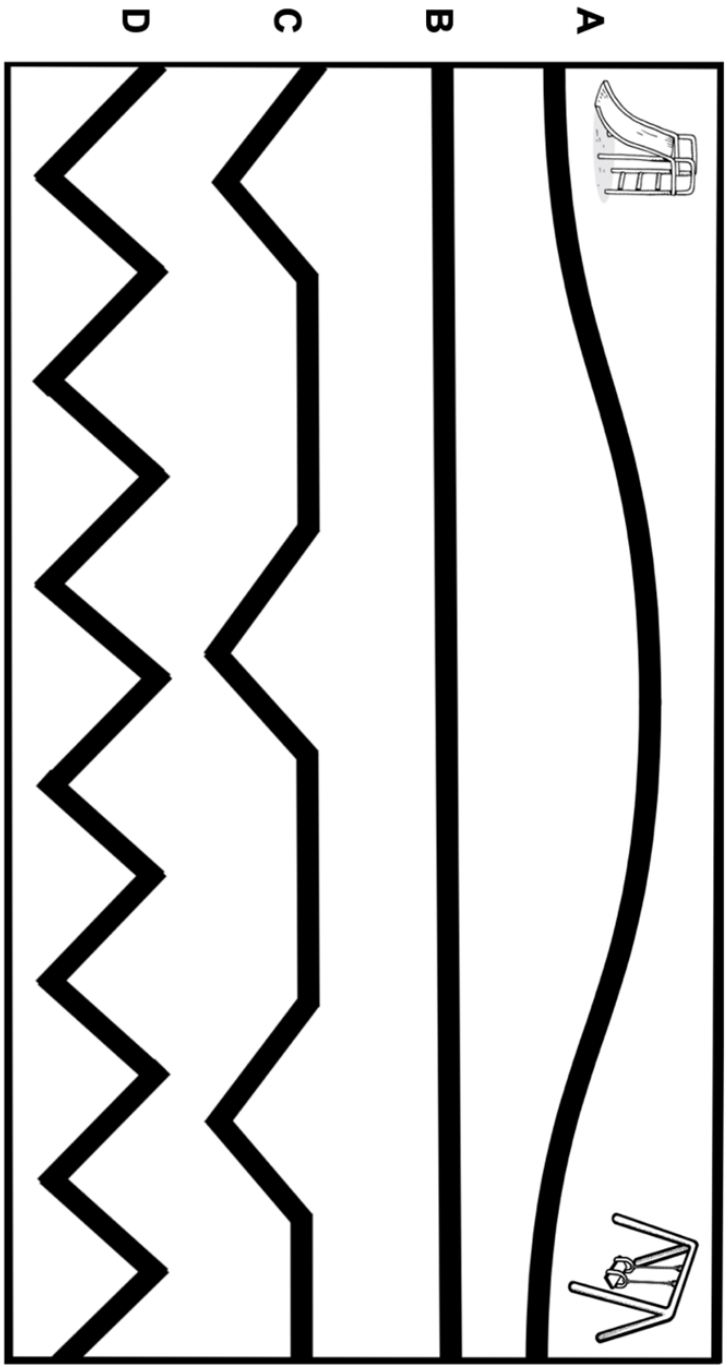
Copy Masters

Task 1

Talia wants to take her dog on a long walk.

Can you use the equipment to measure which path in the park is the longest or are they all the same?

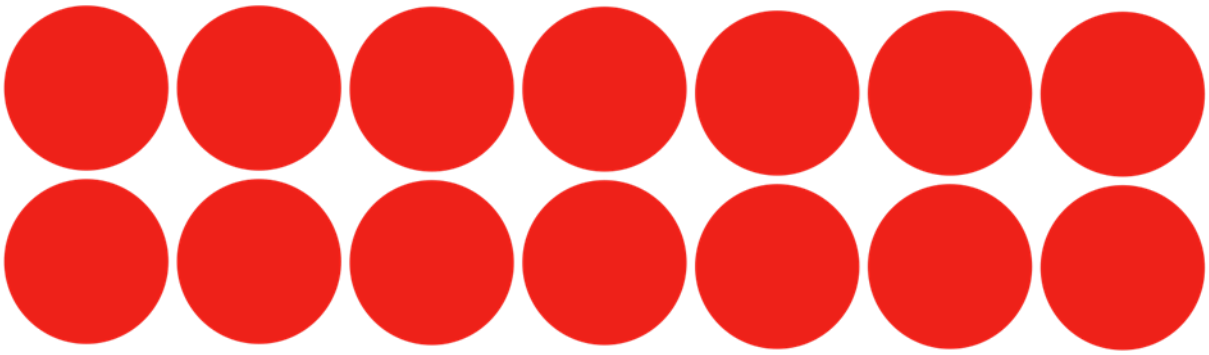
Record your measurement unit and measurement count.



Choose a different set of equipment to measure the paths.

Record your measurement unit and measurement count.

Task 1 - Independent Tasks



Use number sentences to represent this pattern in as many ways as you can.

Task 2

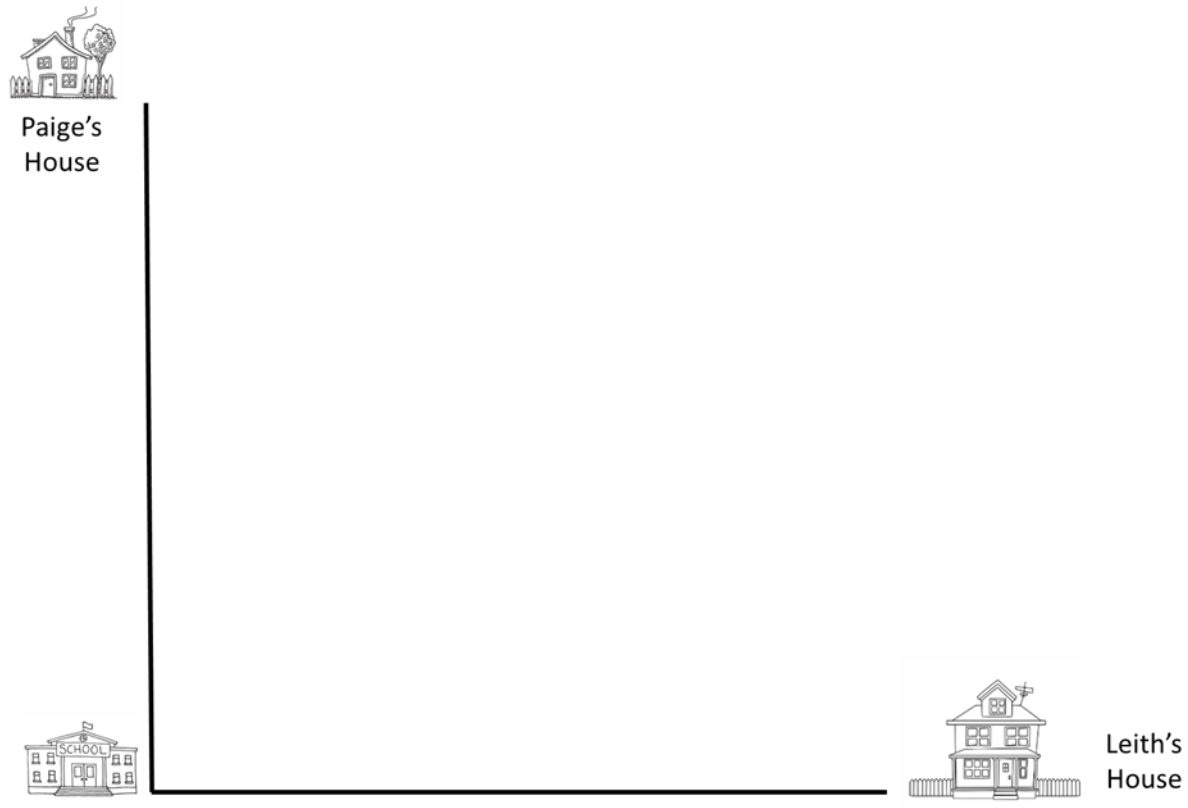
There has been too much rain and parts of the roads have washed away. We need your help to measure the road and find the bridges to help people get home.

Use the equipment to measure each part of the road that has washed away.
Record the unit of measurement and the measurement count.

Now go to the storage shed and use the measurement unit to find the bridge that will fit for the part of the road that washed away.

Work with your partner until the road is fixed and you can drive the car home.

Task 2 - Independent Tasks



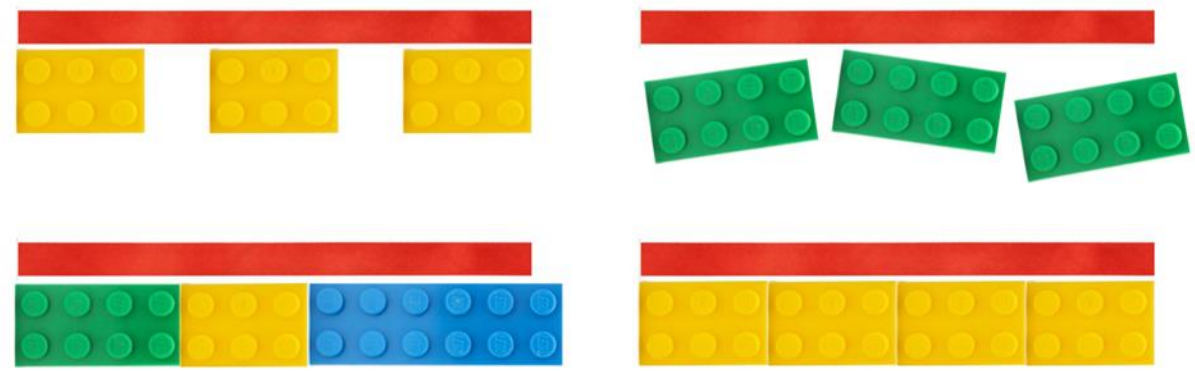
Puawai and Leith both think that they have the longest walk from home to school.

Use the equipment to measure their walk home and see who does have the longest walk.

Record your measurement unit and measurement count.

Task 3

Little Miss Messy is learning to measure. She started by measuring the ribbon.



Look at each picture of how Little Miss Messy measured and decide if she measured correctly.

Can you help her by explaining what she did right and how to fix her mistakes and measure the right way?

Task 3 - Independent Tasks

What am I?

I am 18 cubes long. I have bristles on the end. What am I?

I am 11 cubes long. You draw with me. What am I?

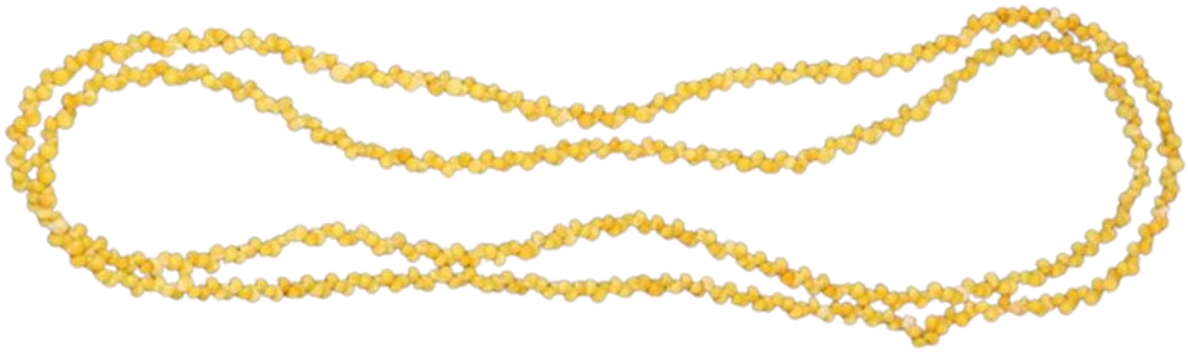
I am 20 cubes long. You write and draw on me. What am I?

I am 8 cubes long. You colour with me. What am I?

I am 14 cubes long. I have words. What am I?

Task 4

Teuila has some kahoa hihi for her family reunion. She wants to keep the longest one to give to her Nena.



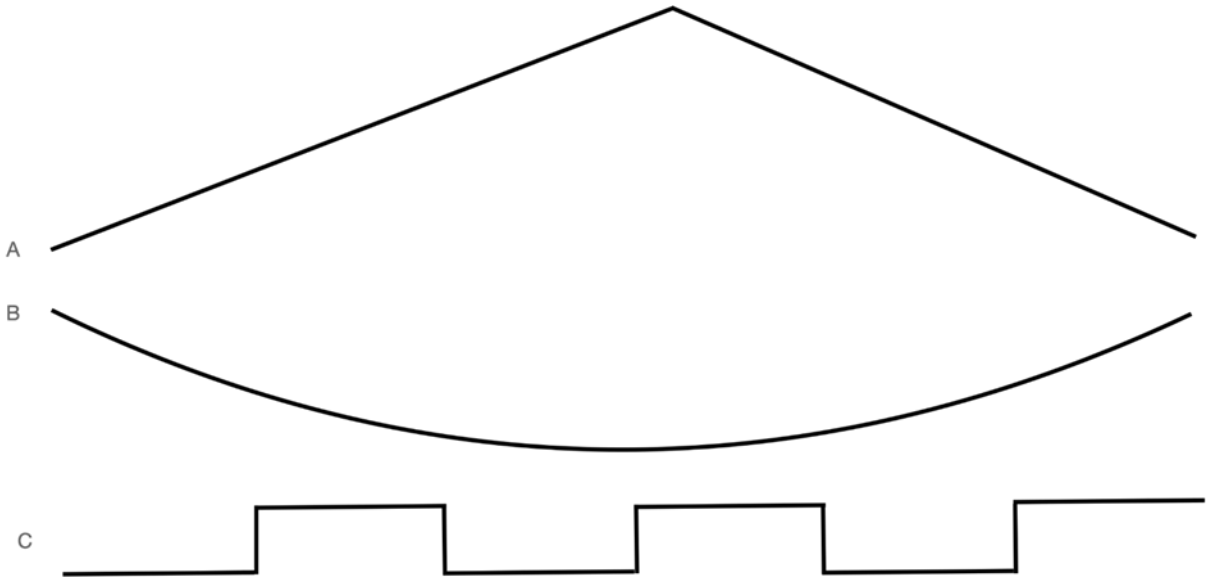
Use the measurement unit to work out which is the longest kahoa hihi. Can you measure it with one measurement unit?

Record the measurement unit and measurement count.

Task 4 - Independent Tasks

Ailine and Emme are making skipping ropes. They want to give the longest one to their oldest brother.

Measure the skipping ropes and see which is the longest.



Record your measurement unit and measurement count.

Task 5

How wide do you think the classroom is?

Use part of your body as a unit of measurement and measure the width. Record your result.

Task 5 - Independent Tasks

How big is your foot?

Draw around your foot. Now see if you can measure the length of your foot with a measurement unit.

Record the measurement count.

Look in the shoe box. Can you find a shoe that will fit you?

Use the measurement unit to check.

Task 6

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?

Which box has the greatest volume?

Task 6 - Independent Tasks

Use the different material to measure the volume of each container.

Record the measurement count for each different measurement unit that you used. Draw a picture to show how you measured the different containers and write the numbers to match.

Task 7

Leilani 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 7 - Independent Tasks

What is the volume of these boxes?

If you were going to make yourself a treasure box, which one would you choose and why?

Task 8

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

Task 8 - Independent Tasks

Look at the pictures.
Which object has the biggest volume?
Which object has the smallest volume?
Do any objects have the same volume?

Have a look around the classroom.
What can you see that has a large volume?
What can you see that has a small volume?
Does anything have the same volume?

Task 9

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 9 - Independent Tasks

Look at the containers.

Which container would hold the greatest volume?
Which container would hold the least volume?
Write down the order from biggest to smallest.

Now test and prove your idea using water.

Task 10

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 10 - Independent Tasks

A book is on one side of the balance scale and two objects are on the other side so the scale is level. What might the two objects be?

Can you find different solutions using the scale?

Task 11

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 - Independent Tasks

What things can you find that are heavy but small?

What things can you find that are light but large?

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?