



RICH MATHEMATICAL TASK BOOKLET

# MEASUREMENT

YEAR 0

## Copy Masters

**Task 1**

George is sorting the coloured pencils.

What coloured pencil is the longest pencil?

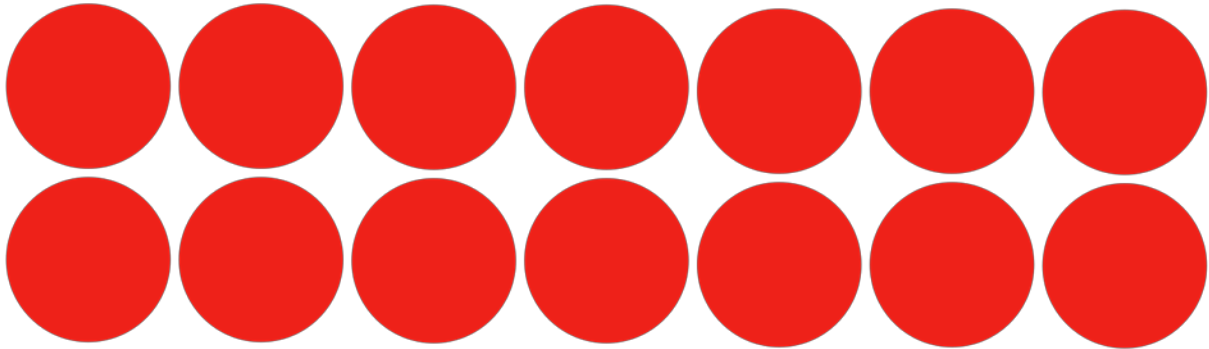
What coloured pencil is the shortest pencil?

Choose a coloured pencil. Put it in the middle of your book.

Can you draw a pencil that would be longer?

Can you draw a pencil that would be shorter?

**Task 1 - Independent Tasks**



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

## Task 2

Talia wants to take her dog on a long walk.

Can you use the equipment to measure which path in the part 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 2 - Independent Tasks**

Compare these objects and put them in order from smallest to longest.

### **Task 3**

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 3 - 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.



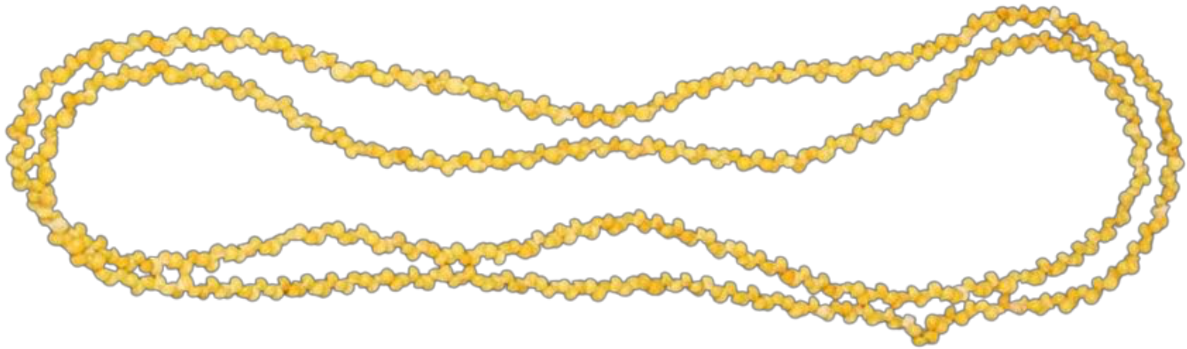
Paige's  
House



Leith's  
House

**Task 4**

Teuila has some kahoā 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 kahoā hihi. Can you measure it with one measurement unit?

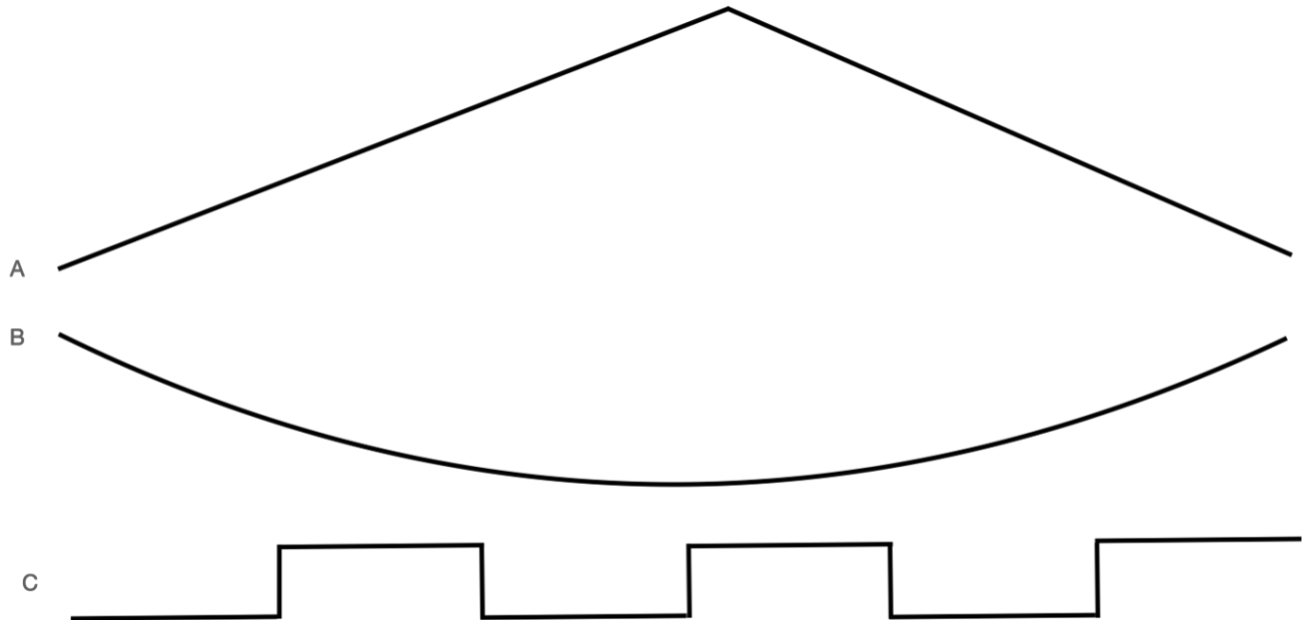
Record the measurement unit and measurement count.



### 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**

Explore these items.

What is the longest?

What is the shortest?

Can you put them in order from shortest to longest?

How do you know?

**Task 6**

What picture book has the biggest surface space?

What picture book has the smallest surface space?

## **Task 6 - Independent Tasks**

How big is your foot?

Draw around your foot and use this to measure and compare objects around the room.

How long is the window?

How tall is the desk?

**Task 7**

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

### **Task 7 - Independent Tasks**

Compare these objects.

What one is the biggest?

What one is the smallest?

Which boxes are the same size?

Can you draw the containers and label these?

**Task 8**

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 8 - Independent Task**

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

### **Task 9**

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

### **Task 9 - Independent Tasks**

Look at the pictures. Compare the objects.

Which object has the biggest volume - holds more? Which object has the smallest volume - holds less?

Do any objects have the same volume?

**Task 10**

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 10 - Independent Tasks**

Pick up two objects, one in each hand.

Compare the objects.

What object is lighter, what object is heavier?

Put the objects in order from heaviest to lighter

### **Task 11**

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 11 - Independent Tasks**

Explore these objects.

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?

Find other solutions using these object and scales.

**Task 12**

Cooper noticed that the blocks are all different sizes.

What block is tallest?

What block is shortest?

What block might be the heaviest?

What block looks like it takes up the most space?