# Thome Connections Math Activities 

Grade 3<br>Measurement

Measuring Area at Home Kilogram Search The Broken Ruler

## Measuring Area at Home

Help your child measure the areas of rectangular surfaces in your home.

1. Together with your child, find four small rectangular objects (e.g., an envelope, postage stamp, greeting card, recipe card)
2. Ask your child to place the rectangular objects on centimeter grid paper attached and trace around them. You may want to make copies of the centimeter grid paper.
3. Have your child measure the area of each rectangle by finding the number of square centimeters within the rectangle. The rectangle might not fit exactly on the lines of the grid paper. Ask your child to record the approximate measurements in the attached chart.

Example:


The area is $21 \mathrm{~cm}^{2}$
because there are 21 squares in the rectangle.

The area is $20 \mathrm{~cm}^{2}$
because there are 20 squares in the rectangle.


Which rectangle has the largest area?
Which rectangle has the smallest area?
What strategy did you use to find the area for the different objects?

## Measuring Area at Home

| Object | Measurement |
| :---: | :---: |
| Example: Recipe Card | about 92 square cm |
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## Measuring Area at Home

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## Kilogram Search

1. Help your child find items in your home that have a mass of one kilogram. For example, your child might be able to find food packages that are labeled ' 1 kg ' or ' 1000 g .' A liter of milk, water, or juice also has a mass of about one kilogram.
2. After your child has found items that have a mass of one kilogram, have him or her find items that have a mass that is:

- less than one kilogram
- about one kilogram
- greater than one kilogram

Note: Have your child record the items in the attached chart.


## Let's Talk About It

## Which items were harder to find? Why?

(Less than one kilogram, about one kilogram, or greater than one kilogram)
What surprised you about the mass of some objects?

| Less Than One Kilogram | About One Kilogram | Greater Than One Kilogram |
| :--- | :--- | :--- |
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## The Broken Ruler

1. Have your child cut out the ruler piece on the attached sheet.
2. Ask your child to use the 'broken ruler' to measure the length of each side of the shape on the attached sheet.
3. Next, have him or her find the perimeter of the shape.


## Let's Talk About It

How did you use the broken ruler to measure the perimeter? What is another way you could find the perimeter?

## The Broken Ruler

## Record the length of each side:



The perimeter of the shape is


