

## Supplies

Plastic or cardboard 1"-tiles. Several sizes of rectangular sheets of construction paper cut so that an exact number of the inch-tiles fit on it. Cut the paper into other shapes, such as circles, ovals, and triangles. Make sure that the rectangular sheets and the non-rectangular are similar in size.

## The Activity

The student will choose a rectangular sheet of construction paper and fill it with rows of inch-tiles until the complete sheet is covered. Next they will calculate the area by counting how many tiles it took to completely cover the sheet and record the number. They will then choose a non-rectangular shape, cover it with the inch-tiles and record the number.

## Variations

- Ask the student to calculate the number of tiles by using multiplication instead of counting.

## Focus:

Encourage the student to focus their attention on the task at hand. Allow the student to get acquainted with the supplies by touching, holding, and talking about them. Then explain what you will do. Formulate a plan with the student.

**Questions:** What is the plan? What will we do first? Next?

## Act:

The student will pick a sheet to be covered and lays out the tiles.

**Questions:** How many rows do you have? How many columns? How many tiles in total? Can you completely cover this round sheet with the square tiles? How come?

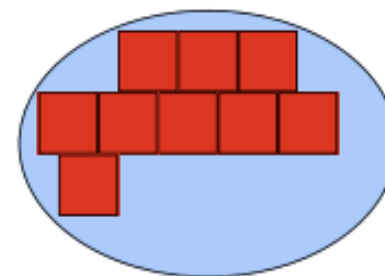
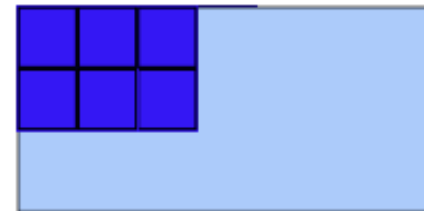
## Reflect:

During and after the activity, reflect on what the student is doing/has done.

**Questions:** What did you do? What happened when you covered the triangle and the rectangular shapes? Could you give the exact area? What did we call it when you could not exactly say how many there were?

## Math Observation Checklist:

This activity will give insight into the student's understanding of size, sequencing, position, attending to more than one piece of information, and attending to relevant information.



## Supplies

Large plastic pattern blocks of different shapes, such as oval, circle, rectangle and square. You can also cut large shapes out of construction board. String, paper and markers are also needed.

## The Activity

First the student will put the shapes in order from largest to smallest, by estimating which one has the greatest perimeter. Next They will use string to measure the perimeter of each block and line up the strings (marked with the shape it measured) from longest to shortest. The student will then compare if they lined up the shapes correctly.

## Variations

- Measure the strings with a ruler and write down the actual size of the perimeter.

## Focus:

Encourage the student to focus the student attention on the task at hand. Allow the student to get acquainted with the supplies by touching, holding, and talking about them. Formulate a plan with the student.

**Questions:** What is the plan? What will we do first? Next?

## Act:

The student orders the shapes according to estimated size and will then measure them by wrapping a piece of string around their perimeters.

**Questions:** Which one do you think is the largest? The smallest? What makes you say that? What can you do to find out?

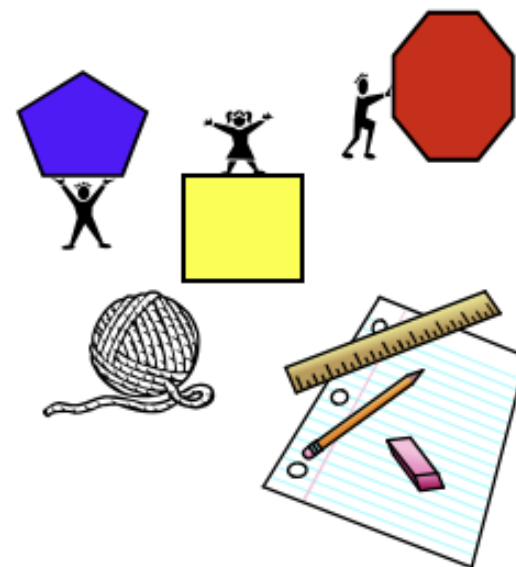
## Reflect:

During and after the activity, reflect on what the student is doing/has done.

**Questions:** What did you do? Were your estimates accurate? What was tricky about this exercise?

## Math Observation Checklist:

This activity will give insight into the student's understanding of size, sequencing, position, attending to more than one piece of information, and attending to relevant information.



## Supplies

Different sized squares or rectangles cut out from poster board or construction paper (make sure the sides are an exact number of inches or centimeters so that no fractions have to be added when calculating the perimeter). Ruler, string or yarn, paper and markers.

## The Activity

The student will measure each side and write the addition sentence to calculate the perimeter. Repeat with different sizes.

## Variations

- The student can make a greeting card from the measured item. After calculating the perimeter, the student can measure a piece of colored yarn to fit around the card and glue it on as a border.

## Focus:

Encourage the student to focus their attention on the task at hand. Allow the student to get acquainted with the supplies by touching, holding, and talking about them. Then explain what you will do. Formulate a plan with the student.

**Questions:** What is the plan? What will we do first? Next?

## Act:

The student uses a ruler to measure each side of a rectangle and writes the math sentences.

**Questions:** Which one do you think is the largest? The smallest? What makes you say that? What can you do to find out? How many sides are the same in this rectangle? How many are different? What is your number sentence?

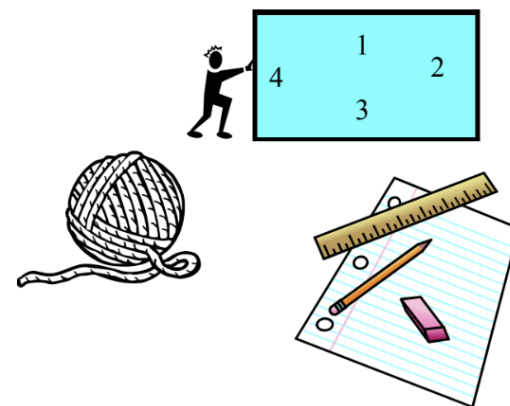
## Reflect:

During and after the activity reflect on what the student is doing/has done.

**Questions:** What did you do? How did you calculate the perimeter?

## Math Observation Checklist:

This activity will give insight into the student's understanding of size, sequencing, position, attending to more than one piece of information, and attending to relevant information.



Side 1 is 12 inches

Side 2 is 6 inches

Side 3 is 12 inches

Side 4 is 6 inches

$12 + 6 + 12 + 6 = 36$

The perimeter is 36 inches