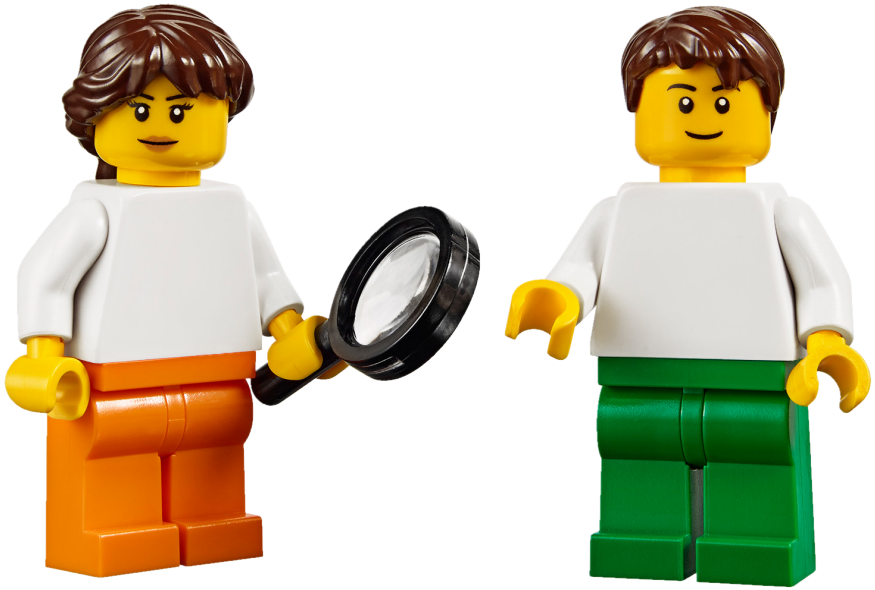
Grades 3 - 5 Activity Starters
Math Activities

Perimeter
Perimeter is the edge like a fence around a playground measured in feet, yards, or meters.
Build a model with a perimeter of 24x. You can choose the units – inches or centimeters using a ruler or tape measurer or you can choose any nonstandard unit (i.e. paper clips, pennies, pencils, dried beans, etc.). Use bricks and other materials to build your perimeter. *Extension:* Build a new model. Measure the perimeter using the same unit of measure and determine if it is the same, smaller, or larger than your original build.

Area
Area is the length multiplied by the width like how large a playground is in square feet or meters.
Build a model that has an area of 24x2. You can choose the units – inches or centimeters using a ruler or tape measurer or you can choose any nonstandard unit (i.e. paper clips, pennies, pencils, dried beans, etc.). Use bricks and other materials to build your area. *Extension:* Build a new model. Measure the area and determine if it is the same, smaller, or larger that your original build.

Volume
Volume is how much a shape can hold in three dimensions, width multiplied by height multiplied by depth, like a box measured in inches or feet cubed. Build a model with a volume of 40x3 . You can choose the units – inches or centimeters using a ruler or tape measurer or you can choose any nonstandard unit (i.e. paper clips, pennies, pencils, dried beans, etc.). Use bricks and other materials to build your area. *Extension:* Change the volume and build a new model. Measure and compute the volume and determine if it is smaller or larger than your original build.



Fractions
Locate several items in your home. Compare the lengths and give them fractional values. For example, my pencil is half the length of my lower leg. My paper is 1/3 the length of the front of my refrigerator. See how many different comparative fractions you can make.

Building Strong Rectangles
Triangles are really strong. Rectangles have to have braces that are triangles to make them strong. Gather bricks and other materials from around your home. Build a rectangle that has braces to support it so it will not collapse. See an example here https://education.lego.com/en-us/lessons/advancing-with-spm/structures#Planitem0

Hold Me Up
Can you create a platform that will hold your weight without crushing? Triangles or triangular prisms, circles or tubes, rectangles or cubes all have properties that can be helpful. What options do you have? Using bricks and other materials, build a sturdy structure to hold your weight.

Off the Table
Structures need a center of gravity to be stable. When you have things hang over the edge, it requires something to balance the weight of what is over the edge. Can you design a model that has more things hanging over the edge than are on the table? Use bricks and other materials to create your model. How many bricks and other materials can you get to hang off the edge of a table?