**SS1 - Area and Perimeter of Rectangles**

Instructions: Learning Activity: You want to build a rectangular garden in your backyard with a perimeter of 24 m. 1. Draw all possible gardens. You can draw the gardens on grid paper (attached) or on plain white paper. 2. Label the dimensions of the gardens (put the length and width on each side) 3. Find the area of each garden and write in the center of your rectangle. 4. Answer these questions: · What are the dimensions of the garden that would give you the greatest possible area? · What are the dimensions of the garden you would want to build? Explain your choice. Practice: Who can fill the page? Materials: Grid Paper, Die or Spinner, and pencil, pen or maker

**How to Play**: 1. Each person will have a sheet of grid paper (or any paper if you can’t print) 2. Take turns rolling the die or spinning the spinner twice. Multiply the numbers. The product will be the perimeter of the rectangle in cms. 3. On your paper, draw as many different rectangles as you can with that perimeter. The rectangles cannot overlap. If it is not possible to draw a rectangle, roll again. 4. Then the next person will go. 5. The first person to cover the page in rectangles, wins!

**Materials**

Needed: · Grid paper or dot paper · Die or spinner (paper with numbers 1 – 6 in a circle, paper clip and pencil) · Pencil (pen, pencil crayons or markers)

**Additional Resources:** Area and Perimeter of Rectangles (Game is in feet, but tell students we would use cm or m) https://www.mathplayground.com/area\_perimeter.html Area and Perimeter of Rectangles https://www.funbrain.com/games/shape-surveyor Area Builder! Level 2 (Build It!) https://phet.colorado.edu/sims/html/area-builder/latest/area-builder\_en.html

**Opportunities for Stretch:** Jack has 100 cm of trim for each rectangular placemat he is making. · List the lengths and widths of 6 possible placemats. · Which placemat would be the best size? Explain your choice.