

# SD 38 K-12 Mathematics & Numeracy

## Grades 3-5: Week Seven

**Big Idea:** We can describe, measure and compare spatial relationships.

**Curricular Content:** geometry – construction of 3D objects including prisms and pyramids, line symmetry, regular and irregular polygons

**Curricular Competencies:** visualize to explore mathematical concepts, communicate mathematical thinking in many ways, use mathematical vocabulary

**Core Competencies focus:** Communication, Creative Thinking

Teachers and Families: The following are five problems/tasks to choose from for this week, based on the above curricular areas of focus.

What polygons can you find in your home, neighbourhood or in the community?  
Can you find regular polygons (same length of sides and size of angles)? Irregular polygons (different lengths of sides and different sizes of angles)?  
Draw/record at least 10 polygons and name them – sort them by their attributes (number or length of sides, number or size of inside angles).

Here are two polygons.  
How are they the same?  
How are they different?



Draw the shapes and record your thinking using arrows, words, numbers or pictures.

One way to think of line symmetry is when something can be “folded” in half and is the same on both sides. Find at least five examples of line symmetry in your home or neighbourhood. You might find line symmetry in art, plants, furniture or buildings. Draw what you find and label the lines of symmetry.

Do some things have more than one line of symmetry?

Here is an example of a 3D “net” of a triangular-based pyramid. It shows the edges and vertices.

What can you find at home to create your own 3D net?  
(straws, sticks, chopsticks, toothpicks, rolled up paper)

Make a 3D net of a type of prism or pyramid and describe it using mathematics vocabulary. What new ideas do you have about shapes?



### Numeracy Task:

Some shapes are more common in buildings and structures. What 2D or 3D shapes can you see in buildings, towers or bridges? Find a structure in our community, or a photograph of one and build it using objects you have at home or draw it, focusing on the shapes you see. Why do you think some shapes are more common than others?