Dear Parents,

Below is the approximate duration and main objectives of the next Math unit

**Unit:** Chapter 8 : Congruent and Similar triangles

**Unit Duration:** 3 weeks

**Learning Objectives:**
By the end of the unit, students should be able to:

1) **Congruent Figures**
- Understand the term congruence as a property of geometrical figures having exactly the same shape and size.
- Relate congruence to real life examples.
- Visualize that two congruent figures can be mapped onto each other under translation, rotation and reflection.
- Examine whether two figures are congruent.
  - Write statements of congruent triangles in the correct correspondence.
  - Demonstrate an understanding of the side angle side (SAS), angle-angle side (AAS), side-side-side (SSS) and right hypotenuse side (RHS) tests for congruent triangles.
  - Recognize that corresponding sides and angles of congruent triangles and polygons are equal.
- Identify congruent triangles by using the tests for congruent triangles.
- Find unknown sides or angles of congruent triangles.

2) **Similar figures**
- Understand the term similar as a property of geometrical figures having exactly the same shape but not necessarily the same size.
- Recognize congruence as a special case of similarity.
- Recognize and state the properties of similar triangles and polygons.
  - Corresponding angles of similar triangles are equal and corresponding sides are proportional.
- Identify similar triangles, including writing ratio relationship with their sides and finding the unknown angles and sides.

3) **Scales and Maps**
- Make simple scale drawings with appropriate scales.
- Interpret scales on maps.
- Calculate the actual distance between two points and the area of a region from a map.
- Use ratios to solve problems involving scales (linear & area scale).