

## Lesson Plan –

**Topic:** Congruent Triangles

**Objective:** To prove triangles are congruent by SSS, SAS, AAS and RHS

**Resources:** Geostrips, worksheet, video, protractor, ruler, paperclips

Note: 30cm ruler is not enough to measure the length of the red strip; need to determine time taken for each part of the lesson

**Number of Lessons:** 1

### Introduction

- Students are grouped and seated at the different stations in the classroom
- Video – see minutes for meeting 2
- Elicit the meaning of the word 'congruency'

### Development

- Each station in the classroom will have an activity either on SSS, SAS or RHS
- Students attempt the task at their station for \_\_\_\_\_ minutes and move on to the next task.

### Conclusion

- Students present what they found/learned in each task
- Conclude with also referring to AAS
- Present follow-up worksheet

### Task – SAS

Take a look at the three triangles provided.

1. Measure the length of the **longest** side of each triangle (the red strip).
2. Measure the length of the blue side of each triangle.
3. Find an angle of  $40^\circ$  in each given triangle and use a paperclip to mark the position of the angle on the triangles.
4. Which two triangles are congruent and why?
5. What do you notice about the position of the angle?
6. Can any two triangles be congruent if given any two sides and any angle?

### Task – SSS

1. Using the red, yellow and white geostrips, try to make a triangle exactly as the one provided.
2. Did you manage?
3. Which colours did you use to make one identical to the one provided?
4. Measure each side of the two triangles and write down your answers below.

Triangle provided	Triangle you made
Yellow:	Yellow:
White:	White:
Red:	Red:

5. What can you conclude about the three sides of the two triangles?

### Task – RHS

1. Measure the **hypotenuse** and the **white side** of this triangle.
2. What type of triangle is this? (right-angled, isosceles, equilateral)
3. Mark the right angle using a paperclip on the given triangle.
4. Use the other strips provided. Can you create another right-angled triangle using the same length for the hypotenuse and white side, but a different length for the third side?
5. Concluding question...