

Subject: Mathematics

Topic: Introduction to Geometry

Level: S.1

Background information:

Learning activity 1:

This activity will be carried out in the third lesson of the topic "Introduction to Geometry". In the first part of this lesson, students have learnt the classification of different types of triangles. In the second part of the lesson, students are asked to do an activity which requires them to construct triangles, and then describe their triangles in terms of their sides and angles. The students can learn the language in written form when they do the worksheet. In the individual task, students are first asked to construct their own triangles and describe some properties of their triangles. They are also asked to classify their triangles. In the group task, students will work in pairs to find out the shape of their partner's triangle by questioning using an information gap. Students can practice using the language which they have learnt orally. Also, the students need to spell and pronounce the key words in order to fill in the worksheets and answer the questions.

1. Content knowledge:

In the first part of lesson, the students have **learned** the classification of different types of triangles:

Triangles can be classified according to the sizes of the angle inside into acute-angled triangle, right-angled triangle and obtuse-angle triangle.

An acute-angled triangle is a triangle with its largest angle is an acute angle.

A right-angled triangle is a triangle with its largest angle is a right angle.

An obtuse-angles triangle is a triangle with its largest angle is an obtuse angle.

Triangles can be classified according to the length of the sizes into scalene triangle, isosceles triangle and equilateral triangle.

A scalene triangle is a triangle enclosed by three unequal sides.

An isosceles triangle is a triangle enclosed by two equal sides.

An equilateral triangle is a triangle enclosed by three equal sides.

2. Language objectives:

1. Students should be able to use the following sentences patterns to describe the properties of triangle:

- My triangle is enclosed by two equal sides.

-The largest **angle** of my triangle is a acute angle.

2. Students should be able to spell the following key words:

acute-angled triangle, right-angled triangle, obtuse-angle triangle, scalene triangle, isosceles triangle and equilateral triangle.

Teacher's instructions:

The following instruction will be given out to the students before they do the individual tasks.



Individual Task:

1. Read the instructions on the worksheet carefully.
2. Draw your own triangle in the space provided.
3. Describe your triangle in terms of **sides** and angles.
4. Classify your triangle according to its properties.

The following instruction will be given out to the students after they have finished the individual tasks and before they do the group tasks.



Pair Work Task:

1. Do not let your partner see your worksheet.
2. Take turns to describe your triangle to your partner.
3. Talk in complete sentences,
4. Draw your partner's triangle in the spaces provided and classify such triangle.
5. Hand in both worksheets together.

S.1 Mathematics

Introduction to Geometry

Worksheet 1

Name: _____ No. _____ Class: _____ Date: _____



Individual Task

Write a short paragraph to

(a) describe the properties of the triangles

(b) classify the *triangles given below*.

The following examples may help you:

*My triangle is enclosed by **two** equal sides.*

The largest angle of my triangle is an acute angle.

This is an isosceles, acute-angled triangle.

My triangle	Description <i>My triangle is a</i>
	-



Pair Work Task

1. Work in pairs. Ask your partner to describe her triangles by questions like the following ones: Are there any equal sides in your triangle? Is the largest angle in your triangle greater than 90°? • Partner should answer in complete sentences.	Answer:
2. Draw your partner's triangle using the information.	
3. Classify your partner's triangle.	<i>This triangle is</i>

* Hand in both worksheets together.