## Subject: Mathematics

**Topic:** Introduction to Geometry

Level: S.1

# **Background information:**

Learning activity 1:

This activity will be carried out in the second lesson of the topic "Introduction to Geometry". In the first part of this lesson, students have learned the definition of different types of angles. In the second part of the lesson, students are asked to do an activity which requires students to describe and classify angles. In the individual task, students are first asked to describe and classify a range of angles using sentences. In the group task, students will work in pairs to find out more about unknown angles. Students can practice using the language which they have learnt orally. Also, the students will have opportunities to spell and pronounce the key words in order to fill in the worksheets and answer the questions

1. Content:

In the first part of lesson, the students learnt the definition of different types of angles: An angle which equal to  $90^{\circ}$  is called a right angle. An angle which equal to  $180^{\circ}$  is called a straight angle. An angle which equal to  $360^{\circ}$  is called a round angle.

An angle which greater than  $0^{\circ}$  but less than  $90^{\circ}$  is called an acute angle. An angle which greater than  $90^{\circ}$  but less than  $180^{\circ}$  is called an obtuse angle. An angle which greater than  $180^{\circ}$  but less than  $360^{\circ}$  is called a reflex angle.

2. Language objectives:

1. Students should be able to use the following sentences patterns to describe different types of angles:

- Angle x <u>is equal to</u> 180 °.

- Angle y is sreater than 270 °but less than 360 °.

2. Students should be able to spell the following key words: *acute angle, right angle, obtuse angle, straight angle, reflex angle and round angle.* 

## **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.
- Using the definition of different types of angles that we have just learnt, describe the range of the unknowns\*angles by using the following sentences patterns:

Angle x is equal to 180 °. - Angle y is greater than  $270^{\circ}$  but less than  $360^{\circ}$ .

3. Identity the unknown angles.

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



Group Task:

- 1. In the group task, work in pairs.
- 2. Do not let your partner see your worksheets.
- 3. Take turns to describe the unknown angles to your partner.
- 4. Talk in complete sentences.
- 5. Draw the unknown angles in the spaces provided and classify such angles.
- 6. Hand in both worksheets together.

#### S.1 Mathematics Identifying Angles (A) Worksheet no. 1 for Student A

Name:	No.	Class:	Date:



## Instructions:

1. According to the definition of different types of angles, describe the range of the unknowns angles by using the following sentences patterns:

- Angle x is equal to 180 °.

- Angle y is greater than 270° but less than 360 °.

2. According to the range of the angles, **classify** me types of the unknown angles.

Example:

- (a) Angle *a* is equal to 90°.
- (b) Angle *a* is a right angle.

2.

- (a)
- (b)

(a)

(b)



(b)



- 1. Describe angles *a* to *d* to your partner.
- 2. Ask your partner what angles *a* to *d* are.
- 3. Listen to your partner's descriptions, draw angles e to h in the spaces provided.
- 4. Classify angles *e* to *h*. Tell your partner what the unknown angles are.
- 5.

	(c)	Draw ansle e in the following box:	6.	(c)	Draw angle/in the following box:
	(d)	Angle <i>e</i>		(d)	
7. box:	(c)	Draw angle $g$ in the following	8. box:	(c)	Draw angle <i>h</i> in the following
	(d)			(d)	

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- 9. Check your answer with your partner.
- 10. Hand in the two worksheets together.

#### S.1 Mathematics Identifying Angles (A) Worksheet no. 1 for Student B

 Name:\_\_\_\_\_\_\_\_\_No. \_\_\_\_\_Class: \_\_\_\_\_\_Date:\_\_\_\_\_\_



Instructions:

(a) According to the definition of different types of angles, describe the unknowns angles by using the following sentences patterns:

Angle x is equal to 180 °. - Angle y is greater than 270 ° but less than 360 °

(b) According to the range of the angles, **classify** the types of the unknown angles.

(a) Angle e is greater than 0° but less than 90°.

(b) Angle *e is* an acute angle.

2.





(b)

(a)



1. Listen to your partner's descriptions, draw angles *a* to *d* in the spaces provided.

2. Classify angles *a* to *d*. Tell your partner what the unknown angles are.

3. Describe angles e to h to your partner.

4. Ask your partner what angles *e* to *h* are.

5. (a) Draw angle *a* in the following box: 6. (a) Draw angle *b* in the following box:

(b) Angle *a* (b)
7. (a) Draw angle *c* in the following 8. (a) Draw angle *d* in the following box:

*(b)* (b)

(e) Check your answer with your partner.

(f) Hand in the two worksheets together.