LESSON PLAN

Subject: Mathematics

Topic: Circle

Age of students: 16

Language level: B1, B2

Time: 60 min

Contents aims:
After completing the lesson, the student will be able to:
Define circle, angles and line segments in circle.
Formulate mathematical relations about circle.
Calculate the area of an circle.
Solve practical tasks concerning circle.

Language aims:
After completing the lesson, the student will be able to:
Use new vocabulary within the topic.
Interpret and communicate mathematics.

Pre-requisites:
- Properties of angles in circle;
- Properties of line segments in circle.

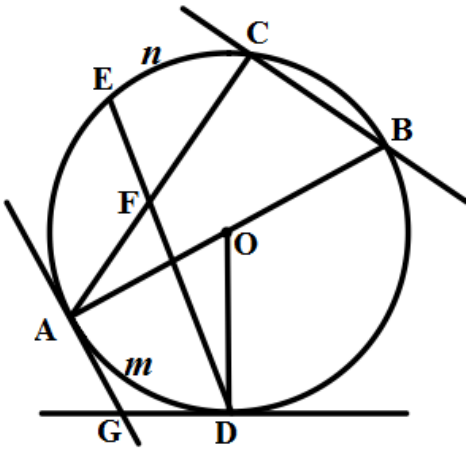
Materials: Worksheet “Circle”.

Procedure steps:
1. Students do the exercise 1 in pairs.
2. Students read, listen and compare.
3. Students do the exercise 2 in pairs.
4. Students read, listen and compare.
5. Students do the exercise 3 individually.
6. Students read, listen and compare.
7. Students do exercises from 4 to 7 in pairs.
8. Students read, compare and explain their point of view.

Attachment:

Circle

1. What are the following elements in the figure:



CB –

AC –

AB –

OD –

GD, GA –

$\smile$AD –

2. Fill in the table:

The property	**The name/explanation of the property**
AB =	
GD =	
< ACB =	
< ODG =	
< AOD =	
< GDE =	
< AGD =	
< DFA =	
$DF \cdot ..... = ... \cdot .....$	

3. What can be worked out using formulae $S = \pi R^2$ and $C = 2\pi R$?

Write down the formulae for radius if

a) the area of a circle is given;
b) the circumference is given!

4. To make a cloak for masquerade, there were drawn two concentric circles on a rectangular piece of cloth, sized 1,20×1,20m. The shortest circumference should coincide with the size of the head circumference -45 cm. Solve how long red ribbon should we buy to sheathe (apšūt) the bottom part. What is the radius of the shortest circumference?

5. The tablecloth is a circle with the radius 1,60 m. Can we cover a round table with the diameter 2,6 m, so that it covered the whole surface and not more than 20 cm wide side round the table edge?

6. We have to put on a round table a quadratic crocheted doily. How long should the coil side be so that the *edge* reached the edge of the table?

7. Confectionery factory is baking a round cake the radius of which is 15 cm. The base of the cake box is a square. What is the size of the square, if the cake should be 5 cm from the edge of the box?