

Lesson Plan

Lesson: Identifying Angles

Length: 30 minutes

Age or Group level intended: 3rd Grade Mathematics

Academic Standard(s): 3.4.2 Identify right angles in shapes and objects and decide whether other angles are greater or less than a right angle.

- Right Angle: An angle that is 90 degrees.
- Acute Angle: An angle that is less than 90 degrees.
- Obtuse Angle: An angle that is greater than 90 degrees.
- Straight Line: An angle that is 180 degrees.

Performance Objective(s):

Given the three types of angles and straight line, students will be able to identify each angle with 100% accuracy.

Given the three types of angles and a straight line, students will be able to use their compass to determine the degree of the angle with 100% accuracy.

Given the three types of angles and straight line, students will be able to define each angle with 100% accuracy.

Assessment: Give each student a test where they have to be able to write the definition and an example of each angle. (Acute, Obtuse, Right angle, and a Straight line) Along with defining and creating an example students will also need to match an example with the name. They will also need to use a ruler and compass to create the angles correctly. Circulate around the room to see if everyone is following directions on the tests.

Advance Preparation by Teacher:

Be able to provide them with a sheet with the definitions of the different angles and examples of them.

Create a space in the room where the students can perform the different angles on the floor.

I will need to supply the children with a ruler, compass, and computer paper to be able to create the angles correctly.

Procedure:

Introduction/Motivation:

Have the students lie on the ground and without them knowing, have them create a right angle, acute angle, obtuse angle, and a straight line. While they create the angle I will put labels by them so the students watching can see it. I will have some of the students make an L shape by putting their bodies together and creating a 90 degree angle. Then I will have them make an alligator mouth showing an acute angle. The last shape I would have them make is to make the hands of the clock reading 3:50 to show that it is an obtuse angle. After their done with making those angles, ask if anyone realizes that they just were using Geometry. **(Gardner: Bodily/Kinesthetic)**

Step-by-Step Plan:

- 1.) Distribute a handout with a definition and a visual picture of what a right angle, acute angle, obtuse angle, and a straight line is. Along with the handout, provide the students with a compass. **(Gardner: Visual/Spatial)**
- 2.) Have the students read along with you the definitions for the different types of angles. **(Gardner: Verbal/Linguistic)**
- 3.) Demonstrate on the overhead how to properly use and read the lines on the compass.
- 4.) Have a couple of students volunteer to create one of the three angles on the overhead and read what the angle is for that shape. **(Bloom: Comprehension)**
- 5.) Have some of the students point out different objects that are acute, obtuse, and right angles in the classroom.
- 6.) Divide the class into groups by numbering them off and have them create the three different types of angles and a straight line using their ruler and compass. **(Gardner: Interpersonal; Bloom: Application)**
- 7.) Take notes on if the class is engaged in the content and see if the groups are mastering the content with 100% accuracy.

Closure:

Today we looked at the three different types of angles along with a straight line. Now go home and show your parents different objects in your home that create these angles.

Adaptations/Enrichment:

Boy with an Oral Expression Learning Disability: Select a group for that will be helpful for him. Give him note cards to write down the different angles.

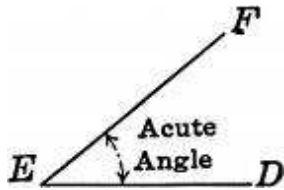
Girl with ADHD-Hyperactivity: Allow her to help pass out handouts and tools for this project. Locate her close to your desk so you can keep a close eye on her. Have children in the class who are mature enough to handle her, help out. Do not have her sit for a long time so she will not have stored up energy.

Boy with Autism: Find out if the boy wants to work alone. If he does allow him so he does not distract the other students.

Self Reflection: After the lesson is complete and the children have left for the day I will sit down at my desk and reflect on the lesson. I will review in my head and on my notes that I take of children working to see if the students were engaged in the activity. Once I am done reviewing that I will evaluate myself is by evaluating their test scores on this lesson. If a majority of students struggled with this lesson, then I will know that I need to review or re-teach some more with my students.

Examples and Definitions of Angles

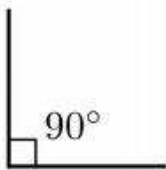
Acute- an angle that is less than 90 degrees



Obtuse- an angle that is greater than 90 degrees



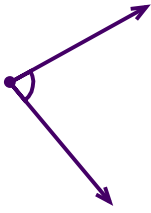
Right angle- an angle that is exactly 90 degrees



Straight Line- a line that is exactly 180 degrees



1



- a. Acute
- b. Obtuse
- c. Right
- d. Straight Line

2



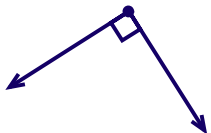
- a. Right
- b. Obtuse
- c. Acute
- d. Straight Line

3



- a. Straight Line
- b. Acute
- c. Right
- d. Obtuse

4



- a. Obtuse
- b. Right
- c. Straight Line
- d. Acute