LESSON PLAN TEMPLATE

**Unit 3 Lesson**: Investigating Angles (Grade 6)

**CURRICULUM EXPECTATIONS (Overall):**

* Classify and construct polygons and angles

**SPECIFIC EXPECTATIONS**

The students will:

1. Measure and construct angles up to 180 degrees using a protractor, and classify as acute, right, obtuse, or straight angles.

**RESOURCES:**

* Computers
* Internet
* Smart Board
* Math Journals
* 180 degree protractors
* Work sheets for evaluation
* 4 Que Cards per student

**INTRODUCTORY ACTIVITY:**

* Interactive Pool Game; [www.coolmath-games.com/0-poolgeometry/index.html](http://www.coolmath-games.com/0-poolgeometry/index.html)
* We will have students get their own laptop from the school set.
* They will then be instructed to go to the link above and play the pool game for 5 minutes to introduce themselves to angles in an interesting way.

**DEVELOPMENT STRATEGIES:**

* Kids will be asked the question, “What are angles and how do they relate to math?” they will raise their hand and the teacher will allow for them to write their idea on the smart board; this will give the teacher a good starting point to what the students know.
* We will then teach students the difference between acute, obtuse, right and straight angles. We will go over this on a smart board using simple angle diagrams, which they will take notes on in their journals. We will then ask students to raise their hands, and we will select one student for each angle to come up and draw one themselves. We will then show everyday objects, such as open and closed books, to demonstrate application in every-day life. Ask them what other objects portray these angles.
* Review how to use a protractor using the smart board tool. Align the protractor on a certain angle and ask students to identify the degrees to which it is measuring.
* Students should be split into pairs, where they will work together in creating and measuring different angles. Have students draw different angles on cards, then record the angle measure on the backs of the cards. They trade cards with their partner to measure and check. Each student will be asked to create 4 different cards, and in turn will receive 4 different cards. They should also be able to identify the type of angle that is drawn.

**CONCLUDING ACTIVITY:**

* Each student will complete the following, “Draw a picture of a house with exactly 24 right angles, 6 acute angles, and 2 obtuse angles. Measure one of each of the angles and record them” within their journals and hand them in.
* This will give the teacher a sense of what they learned from the lesson and if they need any help with specific objectives to meet their expectations.

**METHOD OF EVALUATION:**

* Each student will get a work sheet with three different angles drawn separately. (See following page)
* They will be asked to measure these angles using their protractors and to classify them.
* This will be handed in to the teacher to evaluate and make sure the class is up to speed and understood the lesson.

**FOLLOW-UP IDEAS:**

* For the next class students will review what they learned the previous class by playing Angle Tic-Tac-Toe.
* Angel Tic-Tac-Toe Instructions: Students play with a partner. Students use a circular grid. They say the coordinates of a point, then mark the point on the grid. The first coordinate tells the distance from the centre. The second coordinate tells the angle measure. One player uses Xs, the other uses Os. The first player to get 3 points in a row along a line or around the circle wins the game.
* Then they will move on to constructing polygons using different tools; which would be the next phase of the lesson.

**SELF-REFLECTION:** (to be completed following the lesson)

Measure and Classify the Following Angles:

a)

b)

c)