Subject/Grade: Grade 7 Math **Lesson Title: Circles, Circumference review and begin Area of a Circles**
Teacher: Morganne Connick

Stage 1: Identify Desired Results

Outcome(s)/Indicator(s):

SS7.1: Demonstrate an understanding of circles including circumference and central angles:

a) Identify the characteristics of a circle,
b) Define and illustrate the relationship between the diameter and radius of a circle,
c) Answer the question "how many radii does a circle have and why?"
d) Answer the question "how many diameters does a circle have and why?"
e) Explain (with illustrations) why a specific point and radius length (or diameter length) describes exactly one circle.
f) Illustrate and explain the relationship between a radius and a diameter of a circle,
g) Generalize, from investigations the relationship between the circumference and the diameter of a circle,
h) Define pi and explain how it is related to circles
i) Draw a circle with a specific radius or diameter with and without a compass,
j) Solve problems involving circles.

Key Understandings: ('I Can' statements)	**Essential or Key Questions:**
● I can list characteristics of a circle, ● I can tell the difference between the radius and the diameter of a circle, ● I can draw a circle, then explain the radius and diameter, ● I can explain $\pi$and how to use it when calcululating circles,	● Why is it important to understand the difference between radius and diameter when approaching circumference? ● How can we identify circles in our day to day lives? ● What is the importance of pi?

● I can draw a circle with and without a compass, ● I can solve word problems that involve circles,	● Why should we know how to draw and calculate a circle without a compass?

Prerequisite Learning:

- Understanding of radius, diameter, pi and circumference, along with how to appy these in an equation
- Understand how to find C using radius and diameter
- Effectivly complete a word probelm

Instructional Strategy(ies):

- Lecture portion including slides,
- Group discussion and collaboration to review 8.1 and 8.2

Stage 2: Determine Evidence for Assessing Learning

Formative Assessment: A second check in slip will be handed out to students to do a second check in on how they feel about the subject, as with the previous class, and about the new information.

Stage 3: Build Learning Plan

Set (Engagement):
Students will be given time to ask questions they have and request which areas we focus on in the review.

Length of Time: 5 mins

Development: **Length of Time: 20**

Based on feedback from students I am going to focus on reviewing some of the main points from 8.1 and 8.2. This will include a few slides on construct of circles and more focus on circumference of a circle. Most likely reviewing some of the questions in the textbook to build understanding before me move onto 8.3

Studetns will watch a video about circumference and area of a circle. Students will be moving on to chapter 8.3 area of a circle. Slides will introduce students to the concept of area, and additional information that will support students knowledge including:

- $A=\pi$ x r2 (squared)
- The formal to find A considering r squared,
- Finding the formula when d is given.

Time will also be allotted to do practice questions as a group. These will be presented on a sheet to allow students to follow along, breaking down the questions for them to fill in as we work together. This is time permitting.

Learning Closure: **Length of Time: approx 5 mins**

We will work to the end of class on the area of a circle and continue on into the next class if need be. I do not want to rush this section.

Instructional Strategies:

- Group instruction and collaboration

Materials/Resources:

- Calculators,
- Slides,
- Worksheet for students to follow along with,
- Math Links textbooks,
- Math antics video: https://www.youtube.com/watch?v=O-cawByg2aA
-

Possible Adaptations/ Differentiation:

- Based on formative assessments, I will be reviewing some of the previous units.

Management Strategies:

- Verbal cues

Safety Considerations:

- All COVID-19 protocols will be followed during this activity with students remaining in their seats as much as possible.