

## Alexis Wanner Practicum II- Two Day Lesson Plan

<b>Grade:</b> 7 <sup>th</sup>	<b>Subject:</b> Mathematics
<b>Materials:</b> Note Sheet, Pencil, Scientific Calculator, Pipe Cleaners, Circular objects of varying sizes (Tupperware lids, cups, etc.), notecards	<b>Technology Needed:</b> Smartboard, Scientific Calculator
<b>Instructional Strategies:</b> <ul style="list-style-type: none"> <li><input checked="" type="checkbox"/> Direct instruction</li> <li><input type="checkbox"/> Guided practice</li> <li><input type="checkbox"/> Socratic Seminar</li> <li><input type="checkbox"/> Learning Centers</li> <li><input type="checkbox"/> Lecture</li> <li><input type="checkbox"/> Technology integration</li> <li><input checked="" type="checkbox"/> Peer teaching/collaboration/cooperative learning</li> <li><input checked="" type="checkbox"/> Visuals/Graphic organizers</li> <li><input type="checkbox"/> PBL</li> <li><input type="checkbox"/> Discussion/Debate</li> <li><input type="checkbox"/> Modeling</li> </ul>	<b>Guided Practices and Concrete Application:</b> <ul style="list-style-type: none"> <li><input checked="" type="checkbox"/> Large group activity</li> <li><input checked="" type="checkbox"/> Independent activity</li> <li><input checked="" type="checkbox"/> Pairing/collaboration</li> <li><input type="checkbox"/> Simulations/Scenarios</li> <li><input type="checkbox"/> Other (list) Explain:</li> <li><input checked="" type="checkbox"/> Hands-on</li> <li><input type="checkbox"/> Technology integration</li> <li><input type="checkbox"/> Imitation/Repeat/Mimic</li> </ul>
<b>Standard</b>  <b>7.G.4-</b> Know the formulas for the area and circumference of a circle and use them to solve problems. Informally derive the relationship between the circumference and area of a circle.	<b>Differentiation</b>  <b>Below Proficiency:</b> Students will be able to demonstrate understanding of the different parts of a circle and apply this knowledge to calculate the area and circumference of a circle with significant assistance from the teacher.  <b>Above Proficiency:</b> Students will be able to demonstrate understanding of the different parts of a circle and apply this knowledge to calculate the area and circumference of a circle independently and extend these concepts with a deeper understanding of pi and its relationships with circles.  <b>Approaching/Emerging Proficiency:</b> Students will be able to demonstrate understanding of the different parts of a circle and apply this knowledge to calculate the area and circumference of a circle with minimal assistance from the teacher.  <b>Modalities/Learning Preferences:</b> Visual, Kinesthetic
<b>Objectives</b>  By the end of the two-day lesson, students will be able to <ul style="list-style-type: none"> <li>-identify the parts of a circle (radius, diameter, center, circumference)</li> <li>-explain the relationship between the diameter and circumference of a circle</li> <li>-use a formula to find the circumference of a circle</li> <li>-use a formula to find the area of a circle</li> <li>-identify a semicircle and its parts</li> </ul> <b>Bloom's Taxonomy Cognitive Level:</b>  Understanding, Applying, Analyzing, Evaluating	<b>Behavior Expectations- (systems, strategies, procedures specific to the lesson, rules, and expectations, etc.)</b>  Students will conduct themselves respectfully and work in their assigned spots on the activity and for instruction as well as during homework time, asking questions when help is needed in class.
<b>Classroom Management- (grouping(s), movement/transitions, etc.)</b>  Students will remain seated in their assigned desks throughout the duration of class and follow proper COVID-19 protocols in regard to social distancing and mask wearing.	<b>Behavior Expectations- (systems, strategies, procedures specific to the lesson, rules, and expectations, etc.)</b>  Students will conduct themselves respectfully and work in their assigned spots on the activity and for instruction as well as during homework time, asking questions when help is needed in class.
<b>Minutes</b>	<b>Procedures</b>
<b>150</b>	<b>Set-up/Prep:</b>  This is a two-day lesson. Create notes and activity PowerPoint for lesson. Print one note sheet and one homework assignment ("What is the Title of This Picture?" Worksheet for each student prior to class. Bring circular objects of varying sizes, pipe cleaners (at least one per student) to class as well as construction paper to draw on for each student.
<b>7</b>	<b>Engage: (opening activity/ anticipatory Set – access prior learning / stimulate interest /generate questions, etc.)</b>  Day 1: Have students clear off their desks except for a pencil. Ask the students, "What shapes do you notice in nature?". After a discussion about this, ask "Which of these is the shapes do you think are the most common?". Inform students that circles are the

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7	<p>most common in nature. Have the students turn and talk to a partner to come up with a definition for a circle. Discuss what each group decided.</p> <p>Day 2: Begin by asking students to do a turn and talk with a neighbor about what we learned yesterday through our circle activities.</p>
20  23	<p><b>Explain: (concepts, procedures, vocabulary, etc.)</b></p> <p>Day 1: Following along in PowerPoint, lead students through the process of tracing a circle on their paper. Then, measure the diameter of the circle with a pipe cleaner, bending over the excess. Using the measured pipe cleaner, see how many times the pipe cleaner is used to go around the outside of the circle.</p> <p>Day 2: Lead students through the notes of circles, learning about the parts of the circle, formulas for circumference and area, and about semi-circles. Working as a class and with the aid of scientific calculators, the students will use the formulas for circumference and area to calculate different values about circles.</p>
5  10	<p><b>Explore: (independent, concrete practice/application with relevant learning task -connections from content to real-life experiences, reflective questions- probing or clarifying questions)</b></p> <p>Day 1: The students will then trace another circle and follow the same procedure of measuring the diameter and circumference. The students will begin to see a correlation between the relationship of the diameter and circumference.</p> <p>Day 2: The students will then begin working on their "What is the Title of This Picture?" Worksheet to work more with area, circumference, and parts of a circle. Students may use their scientific calculator to complete the assignment.</p>
8  8	<p><b>Review (wrap up and transition to next activity):</b></p> <p>Day 1: The students will then learn about the unique ratio of the circumference to the diameter is exactly a little over 3, for every circle. This is pi, 3.14.... The number pi has a unique role to play in calculations involving circles, which we will learn more about tomorrow. The students will clean up their workspace, throwing away their pipe cleaners and recycling their papers.</p> <p>Day 2: Hand out a notecard to each student to complete an exit ticket to assess learning of the standard. Each student will turn in the exit ticket before the end of class. The students will pack up their things, filing their notes and homework in their folders.</p>
<p><b>Formative Assessment: (linked to objectives)</b></p> <p><b>Progress monitoring throughout lesson- clarifying questions, check- in strategies, etc.</b></p> <p>Walk around the classroom to monitor students' progress on the circle activity, providing any additional instruction as well as to provide help on homework throughout the class period.</p> <p><b>Consideration for Back-up Plan:</b></p> <p>Prepare additional problems involving circumference, area, semicircles, and applications of pi to supplement instruction and reteach if necessary.</p>	<p><b>Summative Assessment (linked back to objectives)</b></p> <p><b>End of lesson:</b></p> <p>Students will complete an exit ticket solving the area of a circle given the diameter of 26 inches using 3.14 for pi.</p> <p><b>If applicable- overall unit, chapter, concept, etc.:</b></p> <p>The students will take a summative assessment on the standard to ensure their academic progress with this content.</p>
<p><b>Reflection (What went well? What did the students learn? How do you know? What changes would you make?):</b></p> <p>The students really enjoyed the activity part of the lesson. Additional instructions could have been given about how to respectfully handle materials such as pipe cleaners or the circles used for tracing. I ended up cutting out the exit ticket due to a lack of time and some confusion about the worksheet requiring additional instruction.</p>	