Teacher(s): Mrs. Breazeale & Ms. DeBLanc **Subject/Grade:** 7th /Grade Math **Week of:** Jan 29, 2024

Domain: Geometry **Lesson Plan Title:** Circles & Area

	MATHEMATICS - Mississippi College and Career Readiness Standards for 7th Grade
Numbers & Operations	7.NS. 1 Apply and extend previous understandings of addition and subtraction to add and subtract rational numbers; represent addition and subtraction on a horizontal or vertical number line diagram.
Ratios & Proportions	7.RP Analyze proportional relationships and use them to solve real-world and mathematical problems.
Expressions & Equations	7.EE Solve real-life and mathematical problems using numerical and algebraic expressions and equations.
Geometry	7.G.4 Know the formulas for the area and circumference of a circle and use them to solve problems; give an informal derivation of the relationship between the circumference and area of a circle. 7.G.5. Use facts about supplementary, complementary, vertical, and adjacent angles in a multi-step problem to write and solve simple equations for an unknown angle in a figure. 7.G.1 Solve problems involving geometric figures, including actual lengths and area of a scale drawing. 7.G.6 Solve real-world and mathematical problems involving area, volume and surface area of two- and three-dimensional objects c...
Statistics & Probability	7.SP.4 Use measures of center and measures of variability (i.e. inter-quartile range) for numerical data from random samples to draw informal comparative inferences about two populations 7.SP.3 Informally assess the degree of visual overlap of two numerical data distributions with similar variabilities, measuring the difference between the centers by expressing it as a multiple ...

ESSENTIAL QUESTION(S): How do I solve real-world mathematical problems involving area and surface area of composite figures?

Daily Objectives, Focus Questions & Lesson Goals

Monday, January 29, 2024

Focus Questions:

1) What is the relationship between area and circumference?
2) How do I use formulas to find the area and circumference of a circle?

Objective:

Lesson Goals: *I will be able to...*

- Explain the relationship between area and circumference.
- Use the formulas to find the area and circumference of a circle.

Tuesday, January 30, 2024

Focus Question: How will I use iReady to enhance my mathematical skills?

Objective: The student will be able to close mathematical gaps by completing an iReady math lesson on his or her path with a pass rate of 80% or higher.

Lesson Goals: *I will be able to...*

- Take notes on lesson vocabulary.
- Listen to the lesson and record examples in my notes.
- Work out problems on paper when needed.

Wednesday, January 31, 2024

Focus Question: How do mathematicians analyze and correct their graded tests in order to reflect on knowledge needed to master 7th grade math standards?

Objective: The student will be able to examine, analyze, and correct their current mixed practice test (MPT) by reviewing resources provided by the teacher, consulting with peers, and/or asking the teacher for help with 100% accuracy by the end of the lesson.

Lesson Goals: *I will be able to...*

- Differentiate between silly mistakes and lack of knowledge.
- Answer guided questions to examine the thought process of missed items on the Mixed Practice Test.

Thursday, February 1, 2024

Focus Question: How will I calculate unknown dimensions when given an area and length of two and three dimensional composite figures?

Objective: The student will be able to utilize area formulas to calculate unknown dimensions of composite figures by completing the iReady lesson "Area and Surface Area" with 80% accuracy.

Lesson Goals: *I will be able to...*

- Use given areas and given lengths to solve problems involving unknown lengths of two-dimensional composite figures.
- Use given surface areas and given lengths to solve problems involving unknown lengths of right prisms.
- Apply knowledge of surface area of right prisms to solve real-world and mathematical problems involving surface areas of composite figures.

Thursday, February 2, 2024

TBA based on MPT data.

Bottom 25%: Students will be placed in groups based on ability. The general education teacher and the inclusion teacher will review their MPT. The general education teacher and the inclusion teacher will review their MPT and clear up any misconceptions on Tuesday and Thursday.

Top 25%: Students will work through problems on math prodigy while the teacher pulls students that scored below 70% on their current MPT.

Bubbles: Students will be placed in groups based on their ability. Some with higher performing students and some with lower performing students. The students in the higher performing group will learn from their peers and the students in the lower performing groups will act as a tutor to their peers. The general education teacher and the inclusion teacher will review their MPT and clear up any misconceptions on Tuesday and Thursday

MONDAY_ Jan 29, 2024

Bell Ringer: TSW answer the following question: Compare (tell how they are alike) and contrast (tell how they are different) the formula to find the area of a square and the formula to find the area of a circle. Write 1-2 complete sentences. TTW review. **5-7 minutes**

ANTICIPATORY SET: TTW show a video of the children's book, "Sir Cumference and the First Round Table" at Math Read Aloud: Sir Cumference and the First Round Table | Elementary Math Stories . TTW lead students into a discuss about the book. (**Questions:** What is the problem with the king's table? Why is the king unhappy with its shape? Can you construct a better table? Which shape would be better suited for the knights' discussion?) **15 minutes**

Teacher Input: *The teacher will...***20-25 minutes**

- Show the video by Math Antics Math Antics - Circles, What Is PI?
- Pause at key points so the students can take notes and ask questions about what is happening so far. (Questions like what is pi? And where does 3.14 come from?
- Show the video by Math Antics Math Antics - Circles, Circumference And Area

- Pause at key points so the students can take notes and ask questions about what is happening so far. (Questions like how is finding the area of a square similar to finding the area of a circle?)

Guided Instruction/Practice: The student will…**10 minutes**

- Use formulas to calculate the area and circumference of a circle for 10 practice problems.

Closure: TTW ask select students to answer the focus questions.

Assessment: Teacher Observation

TUESDAY_ Jan 30, 2024

WARM-UP/HOOK: *The student will* login to iReady and start a lesson on their path.

INDEPENDENT PRACTICE: (50 minutes)

The student will …

- Listen and complete the assigned lesson to the best of their ability.
- Complete the lesson quiz with 80% or higher accuracy.
- Complete any unfinished teacher assigned lessons.
- The student must obtain 45 minutes.

EARLY FINISHERS:

The student will …

- Login to math prodigy and complete practice problems on surface area.

MATERIALS: notebook paper or "iReady Notes template," computers, projector, exit tickets
ASSESSMENT(S): Teacher observation, exit tickets, iReady lesson quiz results

MPT 3.3 Results

Class	0% - 49% (Critical) *[Rubies]*	50% - 69% (Emerging) *[Ambers]*	70% - 84% (Proficient) *[Emeralds]*	85% - 100% (Advanced *[Sapphires]*
1st				
3rd				
4th				
5th				

7th				

WEDNESDAY_ Jan 31, 2024

WARM-UP/HOOK: *The student will* copy the data set from the board. Find the mean, median. Mode. and range of the data set. TSW then create a dot plot and a box and whisker plot of the data. **(8 minutes)** TTW will invite students to the board to demonstrate each part. **(8 minutes)**

TEACHER INPUT: (2 minutes)

The teacher will …

- Direct students to write their score at the top of their guided questions and circle the problems they missed.
- Review the most missed questions.

INDEPENDENT PRACTICE: (30 minutes)

The student will …

- Rework problems on their test paper.
- Justify why they missed certain problems.
- Compare their graded test to the teacher's class set/guided notes and questions.
- Identify careless mistakes and correct them.
- Complete guided questions for problems missed on MPT 3.3.
- Get it signed by their parents or guardian and return the following day

Meanwhile…

TEACHER CONFERENCES: The teacher will invite individual students to her desk to discuss their most recent MPT and clear up any misconceptions and offer support. **(30 minutes)**

EARLY FINISHERS: The student will get iReady or Math Prodigy and wait patiently to be called to the teacher's desk to discuss the test and any misconceptions.

TEACHER INPUT: **(10 minutes)**

The teacher will ...

- Review the most missed problems or take any questions the students have.
- Check over student work and provide feedback.
- Choose a student to staple the remainder of the student's paper.
- Explain that it is mandatory to bring their tests back signed by tomorrow.

STUDENT REFLECTION/EXIT TICKET: *The student will* complete an exit ticket based on the most missed question(s). The teacher will use this data to determine which students need extra support. **(5 minutes)**

MATERIALS: graded Tuesday tests, test analysis sheets, stapler, staples, exit tickets

THURSDAY_ Feb 1, 2024

WARM-UP/HOOK: *The student will* login to iReady and choose "Area and Surface Area" Take notes on lesson vocabulary and lesson goals. **(5 minutes)**

TEACHER INPUT: **(30 minutes)**

The teacher will …

- Present the lesson objectives.
- Use questioning strategies to ALL students to answer questions.
- Direct students to copy at least 3 examples from the lesson.

INDEPENDENT PRACTICE: **(10 minutes)**

The student will …

- Complete the lesson quiz with 80% or higher accuracy.

STUDENT REFLECTION/EXIT TICKET: *The student will* complete an exit ticket based on today's learning target. The teacher will use this data to determine which students need extra support. **(5 minutes)**

MATERIALS: notebook paper or "iReady Notes template," computers, projector, exit tickets

ASSESSMENT(S): Teacher observation, exit tickets, iReady lesson quiz results

FRIDAY_ Feb 2, 2024

To Be Announced based on the most recent MPT Math data.

Most Missed Standard(s)	Objective(s)	Activity
	TSWBAT	
	TSWBAT	
	TSWBAT	

Meanwhile…

TEACHER CONFERENCES: TTW will finish inviting individual students to her desk to discuss their most recent MPT and clear up any misconceptions and offer support. **(30 minutes)**

STUDENT REFLECTION/EXIT TICKET: *The student will* complete an exit ticket based on the most missed question(s). The teacher will use this data to determine which students need extra support. **(5 minutes)**

MATERIALS: returned Tuesday tests, exit tickets

ASSESSMENT(S): Teacher observation, exit tickets