# Week of 1/25/16-1/29/16 $7^{\text {th }}$ Grade Math - Booher, Clarke, Cooper, \& Miller 

| Topic: <br> - Geometry: - Circles | Standards: <br> - 7.G. 4 Know the formulas for 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. |
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| Lesson Essential Question: <br> - What is the relationship between the area and circumference of a circle and how can this be used to solve problems? | Students will be able to.... <br> - Derive the formula for the circumference of a circle. <br> - Derive the formula for the area of a circle. <br> - Describe the relationship between the circumference and area of a circle. <br> - Use the formula for circumference of a circle to solve problems. <br> - Use the formula for area of a circle to solve problems. <br> - Determine the radius or diameter of a circle when the area or circumference is known. |
|  | Students will know... <br> - The formulas for area and circumference of a circle. <br> - Conceptually what pi is. <br> - The different properties of a circle: radius, diameter, arc, and chord. <br> - The relationship between area and circumference of a circle. |
| Activating Strategy: <br> - BrainPOP videos <br> - Circle Pi <br> - Flocabulary video <br> - Area and Circumference | Vocabulary: <br> - Radius, diameter, arc, chord, circumference, area, pi, ratio, irrational number, inscribed, square root (perfect square), perimeter |


| Lesson Instruction |  |
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| Learning Activity/Assignment 1: UNDERSTANDING PI \& CIRCUMFERENCE <br> - Foldable -Properties of a circle (radius, diameter, chord, arc) <br> - "Saving Sir Cumference" activity- understanding what pi is <br> - "Sir Cumference and the Dragon of Pi" read aloud book <br> Assessment Prompt for LA 1: <br> - Analysis of "Saving Sir Cumference" activity table and questions | Graphic Organizer: <br> - Foldable Properties of a circle (radius, diameter, chord, arc) |
| Learning Activity/Assignment 2: CIRCUMFERENCE OF CIRCLES <br> - BrainPOP-Circles video and quiz <br> - 100,000 Digits of Pi <br> - Guided Notes- Perimeter and Circumference <br> - Perimeter and Circumference Practice <br> Assessment Prompt for LA 2: <br> - BrainPOP interactive quiz |  |
| Learning Activity/Assignment 3: AREA OF CIRCLES <br> - BrainPOP-Pi video and quiz <br> - Guided Notes- Area of a Circle <br> - Area of a Circle Practice Assessment Prompt for LA 3: <br> - Exit Ticket | Assignment: <br> - Spiral Review Practice Problems |

## Learning Activity/Assignment 4: AREA OF CIRCLES - COMPLEX

- Flocabulary: Circles- Circumference and Area video and quiz
- Finding Area Challenge Activity (shaded areas and compound shapes)
- Versatiles Activity (Finding area of shaded and compound shapes)

Assessment Prompt for LA 4:

- Flocabulary interactive quiz


## Learning Activity/Assignment 5: AREA AND CIRCUMFERENCE OF CIRCLES WORD

 PROBLEMS- Pi Song
- Area and Circumference Word Problem Activities
- "What did the Pencil Say to the Paper?"
- "How do you get a One-Armed Monkey Down from a Coconut Tree?"
- Additional Word Problems on pg. 181 of the EOG Ready Workbooks Assessment Prompt for LA 4:
- 3-2-1


## Summarizing Strategy:

- Respond to Essential Question with partner
- One sentence summary independently

