| Topic: <br> - Geometry: Triangles <br> - Geometry: Angles | Standards: <br> - 7.G.2: Draw geometric shapes with given conditions. Focus on constructing triangles from three measures of angles or sides, noticing when the conditions determine a unique triangle, more than one triangle, or no triangle. <br> - 7.G.5: Use facts about supplementary, complementary, adjacent, and vertical angles in a multi-step problem to write and solve simple equations for an unknown angle in a figure. |
| :---: | :---: |
| Lesson Essential Question: <br> - How do the given conditions affect the drawing of a geometric shape? <br> - How can the properties of angles be used to solve multistep problems? | Students will be able to.... <br> - Construct triangles from three measures of angles. <br> - Construct triangles from three measures of sides. <br> - State the relationships between supplementary, complementary, vertical, and adjacent angles. <br> - Develop equations for an unknown angle in a figure. <br> - Solve simple equations for an unknown angle in a figure. |
| Activating Strategy: BrainPOP videos | Vocabulary: <br> - Supplementary, complementary, vertical angles, adjacent angles, corresponding angles, alternate interior angles, alternate exterior angles, transversal, parallel, perpendicular, scalene, isosceles, equilateral, right, acute, obtuse |


| Lesson Instruction |  |
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| Learning Activity 1: | Graphic Organizer: |
| • Foldable- Different types of Angles (Vertical, Adjacent, Supplementary, | • Foldable - |
| $\quad$ Complementary) | Different types of |
| - Interactive Study Guides- Guided Notes 7.1 and 7.2 | Angles (Vertical, |
| • BrainPOP- Angles | Adjacent, |
| • EOG Ready practice pg 142-143 | Supplementary, |
| Assessment Prompt for LA 1: | Complementary) |

- Analysis of performance during BrainPOP quiz


## Learning Activity 2:

- BrainPOP- Parallel and Perpendicular Lines
- Vocabulary- Alternate Exterior, Alternate Interior, Corresponding Coloring Activity
- Pizazz Practice Activities


## Assessment Prompt for LA 2:

- Think-Pair-Write


## Learning Activity 3 :

- Finding the Missing Variable using Equations activity
- Real-World Word Problem Activity

Assessment Prompt for LA 3:

- Class Discussion


## Learning Activity 4:

- Find the Missing Angle Challenge Problems

Assessment Prompt for LA 4:

| $\bullet$ Exit Ticket |  |
| :--- | :--- |
| Learning Activity 5: |  |
| $\quad \bullet \quad$ Triangle Sum Theory Notes and Activities |  |
| Assessment Prompt for LA 4: |  |
| $\bullet \quad 3-2-1$ |  |

## Summarizing Strategy:

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

