| Topic: <br> - Geometry: <br> - Triangles <br> - Angles <br> - Scale Drawings | Standards: <br> - 7.G.1: Solve problems involving scale drawings of geometric figures, including computing actual lengths and areas from a scale drawing and reproducing a scale drawing at a different scale. <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 can the properties of angles be used to solve multi-step problems? <br> - How can you use scale drawings to solve real world problems involving geometric figures? | Students will be able to.... <br> - Construct triangles from three measures of angles and 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. <br> - Reproduce a scale drawing at a different scale. |  |
|  | Students will know... <br> - The triangle inequality theorem and triangle sum theory <br> - The properties of supplementary, complementary, vertical, and adjacent angles. <br> - How to draw a scale drawing using scale factor and similar figures. |  |
| 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, scale, scale drawing, scale factor, similar figures |  |
| Lesson Instruction |  |  |
| Learning Activity/Assignment 1: <br> - Review practice- triangles and angles <br> - Graded SchoolNet classwork activity in pairs- triangles and angles Assessment Prompt for LA 1: <br> - Analysis of SchoolNet data |  | Graphic Organizer: <br> - Foldable - Different types of Angles (Vertical, Adjacent, Supplementary, Complementary) |
| Learning Activity/Assignment 2: <br> - BrainPOP-Similar Figures <br> - Similar Figures Guided Notes <br> - Similar Figures/Scale Drawing Practice Activities Assessment Prompt for LA 2: <br> - Exit Ticket |  | Assignment: <br> - SchoolNet Classwork <br> - Practice Problem Activity |

## Summarizing Strategy:

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

