

Grade 4 2D Geometry Assessment Task:

Name: _____

Convince Shapeshifter to Move To Your Town!

As we read the book, *The Greedy Triangle*, 2D geometry is very important to the Shapeshifter! You are going to help him decide on his new retirement community. Design a map of a village or town that you think the Shapeshifter should move to. When you are finished, write a letter to Shapeshifter highlighting the geometric properties of your town and convince him to move in! Be sure to use the following criteria:

Angles:

- all 90 degree angles labeled with the right angle symbol
- at least two 45 degree angles coloured yellow
- at least two 135 degree angles coloured brown
- at least one building or roadway named according to its angle (e.g., 100 degree Coffee Shop)

Polygons:

- include at least one triangle, pentagon, hexagon, heptagon, and octagon (colour coded in legend)

Quadrilaterals:

- at least 2 different types of parallelograms (colour coded in legend)
- include 2 different rhombi and trapezoids (colour coded in legend)

Symmetry:

- include an element of symmetry with at least 1 line of symmetry (e.g., a symmetrical building OR a symmetrical area of town OR the entire town can be symmetrical)

Use the assessment rubric on the other side of this page to help you work towards your best mark.

2D Shapes and Quadrilaterals

Name: _____

Criteria	Level 1	Level 2	Level 3	Level 4
<p>Communicates their solution clearly and logically</p> <p>(e.g., using accurate visual representations of regular and irregular two-dimensional shapes)</p>	<ul style="list-style-type: none"> • uses visual representations of 2D shapes with limited accuracy • provides written explanation with few details and major omissions 	<ul style="list-style-type: none"> • uses accurate visual representations of 2D shapes with some accuracy • provides a written explanation with some details 	<ul style="list-style-type: none"> • uses accurate visual representations of 2D shapes with considerable accuracy • provides an accurate, detailed written explanation 	<ul style="list-style-type: none"> • uses accurate visual representations of 2D shapes with a high degree of accuracy • provides an accurate, detailed written explanation
<p>Accurately applies knowledge of angles and geometric properties of polygons and quadrilaterals</p> <p>(e.g., greater than/ess than right/90 degree angle, trapezoid has one set of parallel lines)</p>	<ul style="list-style-type: none"> • with limited clarity, identifies few polygons and/or quadrilaterals • with limited accuracy, describes and compares angles and right angles 	<ul style="list-style-type: none"> • with some clarity, identifies some polygons and quadrilaterals • with some accuracy, describes and compares angles and right angles 	<ul style="list-style-type: none"> • with considerable clarity, identifies several polygons and quadrilaterals • with considerable accuracy, describes and compares angles and right angles 	<ul style="list-style-type: none"> • with a high degree of clarity, identifies many polygons and quadrilaterals • with thorough accuracy, describes, identifies, and compares angles and right angles
<p>Uses planning skills to understand and carry out the plan</p> <p>(e.g., meets the specified criteria of the task)</p>	<ul style="list-style-type: none"> • meets few of the specified criteria according to the assigned expectations 	<ul style="list-style-type: none"> • meets some of the specified criteria according to the assigned expectations 	<ul style="list-style-type: none"> • meets most of the specified criteria according to the assigned expectations 	<ul style="list-style-type: none"> • excels beyond the basic criteria for this assignment (e.g., used more than 1 line of symmetry, provided more complex representations)
<p>Demonstrates knowledge of content</p> <p>(e.g., use of tools, terms, procedural skills)</p>	<p>Demonstrates a limited understanding of the terms:</p> <ul style="list-style-type: none"> • parallel • congruent • symmetry <p>Uses tools such as a mira or protractor with limited effectiveness.</p>	<p>Demonstrates some understanding of the terms:</p> <ul style="list-style-type: none"> • parallel • congruent • symmetry <p>Uses tools such as a mira or protractor with some effectiveness.</p>	<p>Demonstrates a considerable understanding of the terms:</p> <ul style="list-style-type: none"> • parallel • congruent • symmetry <p>Uses tools such as a mira or protractor with considerable effectiveness.</p>	<p>Demonstrates a high degree of understanding of the terms:</p> <ul style="list-style-type: none"> • parallel • congruent • symmetry <p>Uses tools such as a mira or protractor with a high degree of effectiveness.</p>