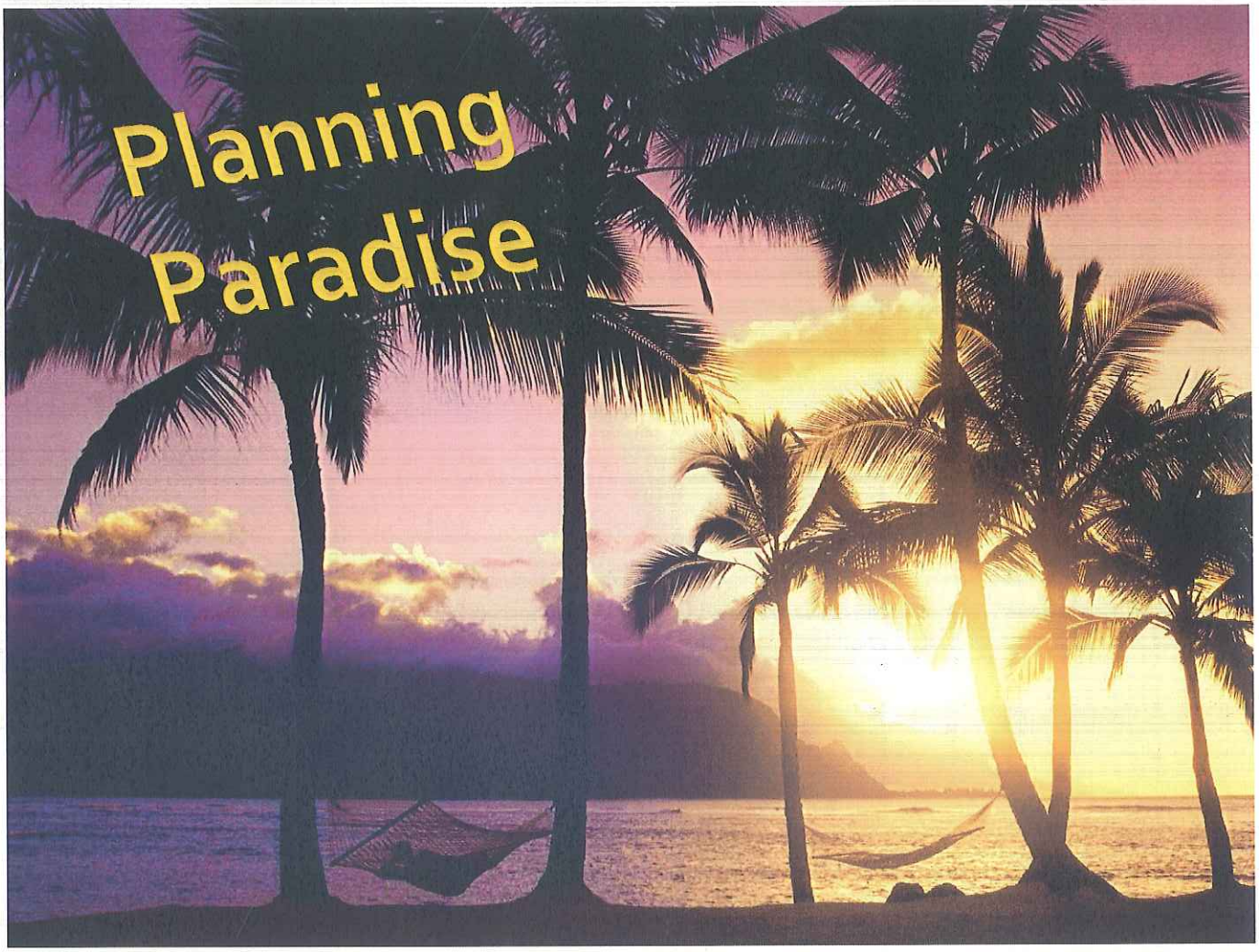


"Turning your dreams into a reality"

Name: _____

Hour: _____

*Paradise/Room:*_____

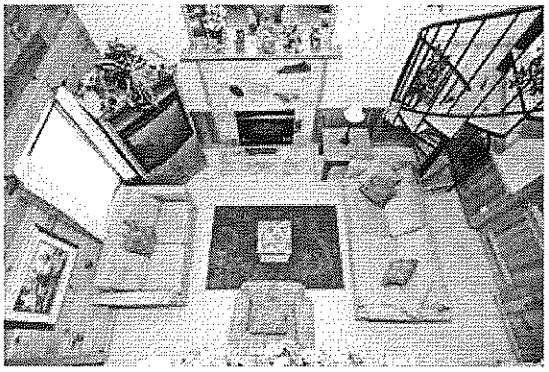
Company Name: _____

Chapter 6/7 – What's Due When

Day	What's Due?	Topic	Class work	Homework
Pre1	Chapter 5 Test Review	Chapter 5	Chapter 5 Test	Shape Finders Quadrilateral Activity, Trapezoid Properties on Sheet
1	Shape Finders Worksheet, Trapezoid Properties in Hierarchy Sheet	Making a Blueprint, Trapezoids	Rough Blueprint, Trapezoid Recap, Trapezoid Checkpoint, Trapezoid Sheet	Finish Rough Blueprint, Finish Trapezoid Sheet, Parallelogram Properties on Sheet
2	Rough Blueprint Layout, Parallelogram Properties in Hierarchy Sheet, Trapezoid Sheet	Parallelograms	Correct Trapezoid Sheet, Parallelogram Recap, Parallelogram Checkpoint, Parallelogram Sheet	Finish Parallelogram Sheet, Rhombi Properties on Sheet
3	Rhombi Properties in Hierarchy Sheet, Parallelogram Sheet	Rhombus	Correct Parallelogram Sheet, Rhombi Recap, Rhombi Checkpoint, Rhombus Sheet	Finish Rhombus Sheet, Rectangle Properties on Sheet
4	Rectangle Properties in Hierarchy, Sheet, Rhombus Sheet	Rectangles	Correct Rhombi Sheet, Rectangle Recap, Rectangle Checkpoint, Rectangle Sheet	Finish Rectangle Sheet, Square Properties on Sheet
5	Square Properties in Hierarchy, Rectangle Sheet	Squares	Correct Rectangle Sheet, Square Recap, Square Checkpoint, Square Sheet	Finish Square Sheet, Kite Properties on Sheet
6	Kite Properties in Hierarchy Sheet, Square Sheet	Kites	Correct Square Sheet, Kite Recap, Kite Checkpoint, Kite Sheet	Finish Kite Sheet, Who Am I? WS, Begin Final Blueprint
7	Kite Sheet, Who Am I? WS	Hierarchy of Quadrilaterals	Correct Kite Sheet, Properties of Quadrilaterals Recap, Hierarchy Activity on Posters, Final Blueprint	Finish Final Blueprint, Final Reflection Paper, Cover Page, Missing Project Pieces
8 Exam Day!	Entire Project: Cover page, 6 Quadrilaterals Sheets (final), Final Blueprint, Write-up Reflection	Presentations	Presentations of Projects	End of Trimester! - None

Planning Paradise

Congratulations! You have been invited to create a blueprint of your dream location. You will be competing against other top decorators in the area, so be ready to bring your A-game! This room can be any shape you choose. There are a few restrictions in your room.



There must be:

1. Trapezoid
2. Parallelogram
3. Rhombus
4. Rectangle
5. Square
6. Kite

This room can be a bedroom, living room, recreation room, outdoor arena, vacation getaway, amusement park, etc. All that is asked is for you to design the floor plan. For each shaped object in the room, you must provide appropriate scaled dimensions. For example, you would not want a rectangular, 2x3 foot bed since you could not fit into it. Provide the side lengths, angle measures, area, perimeter, and a drawing of each shape in it's furniture state on the table provided for each of the needed six quadrilaterals.

Turn in your proposal in a packet in the following order:

1. Cover Page – name, hour, company, room you are creating
2. Quadrilateral Pieces of Paradise – object, side lengths, angle measures, scale factor, ratio of sides, areas, ratio of areas, perimeters, ratio of perimeters, enlargement/reduction
    a. Trapezoid
    b. Parallelogram
    c. Rhombus
    d. Rectangle
    e. Square
    f. Kite
3. Blueprint – Colorful layout with all 6 quadrilaterals included with reasonable scale dimensions
4. Who Am I? WS – Completed with an answer and reason why for all 7 descriptions
5. Shape Finders WS – Completed table with all 7 quadrilaterals

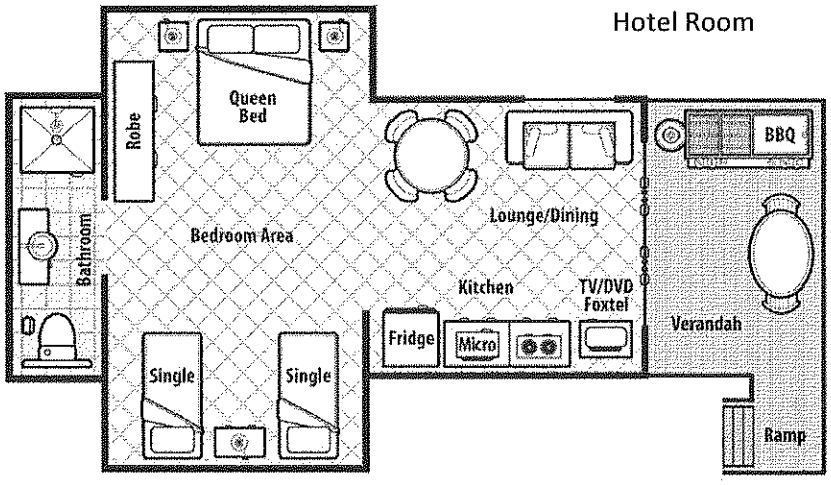
Planning Paradise

6. Hierarchy WS – Completed notes sheet with all properties included and extra notes given in videos

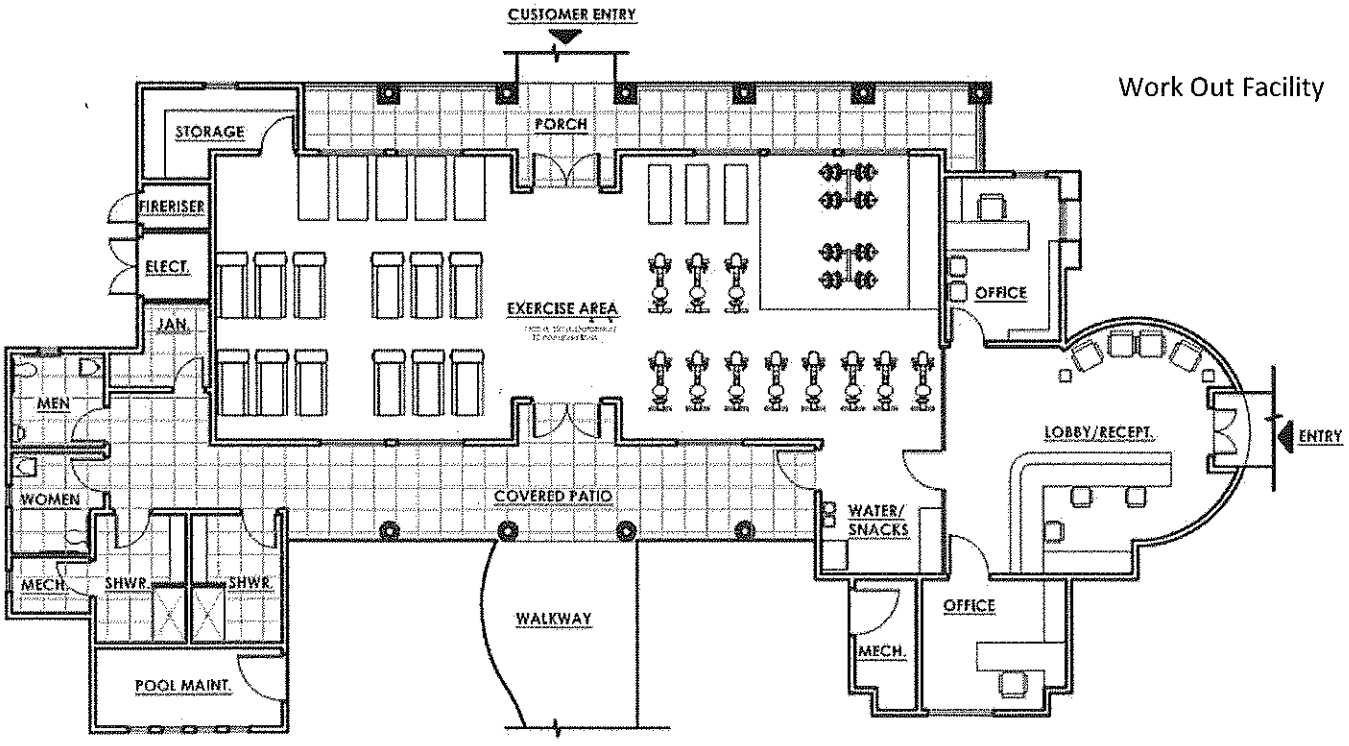
7. Reflection – What did you enjoy most about this project? What would you change? What was the coolest thing you learned? How will you continue to use this information? Where else are quadrilaterals used in real life? (Make sure it is typed double spaced with no grammar or spelling errors, about 1 page)

Examples of Blueprints:

Hotel Room



Work Out Facility



Blueprint - Rough Draft

Remember th

Planning Paradise – Rubric (Chapters 6 and 7)

Project Piece	Description	Points Possible
Trapezoid *All Perimeters and Areas MUST be supported with the proper calculations!*	Object _____/1 Side Lengths (1 point for length, 1 for units)_____/2 Angle Measures (1 point for each pair labeled)_____/2 Blueprint Shape and Actual Shape Drawn _____/2 Scale Factor _____/1 Ratios of Sides and Ratio of Angles _____/2 Perimeter Equation: _____/1 Perimeter of Scale Model with correct units ____/2 Perimeter of Actual Shape with correct units _____/2 Ratio of Perimeters _____/1 Area of Scale Model with correct units ____/2 Area of Actual Shape with correct units _____/2 Ratio of Areas _____/1 Enlargement/Reduction _____/1	_____/22
Parallelogram *All Perimeters and Areas MUST be supported with the proper calculations!*	Object _____/1 Side Lengths (1 point for length, 1 for units)_____/2 Angle Measures (1 point for each pair labeled)_____/2 Blueprint Shape and Actual Shape Drawn _____/2 Scale Factor _____/1 Ratios of Sides and Ratio of Angles _____/2 Perimeter Equation: _____/1 Perimeter of Scale Model with correct units ____/2 Perimeter of Actual Shape with correct units _____/2 Ratio of Perimeters _____/1 Area of Scale Model with correct units ____/2 Area of Actual Shape with correct units _____/2 Ratio of Areas _____/1 Enlargement/Reduction _____/1	_____/22
Rhombus *All Perimeters and Areas MUST be supported with the proper calculations!*	Object _____/1 Side Lengths (1 point for length, 1 for units)_____/2 Angle Measures (1 point for each pair labeled)_____/2 Blueprint Shape and Actual Shape Drawn _____/2 Scale Factor _____/1 Ratios of Sides and Ratio of Angles _____/2 Perimeter Equation: _____/1 Perimeter of Scale Model with correct units ____/2 Perimeter of Actual Shape with correct units _____/2 Ratio of Perimeters _____/1 Area of Scale Model with correct units ____/2 Area of Actual Shape with correct units _____/2 Ratio of Areas _____/1 Enlargement/Reduction _____/1	_____/22
1st Page Total		_____/66

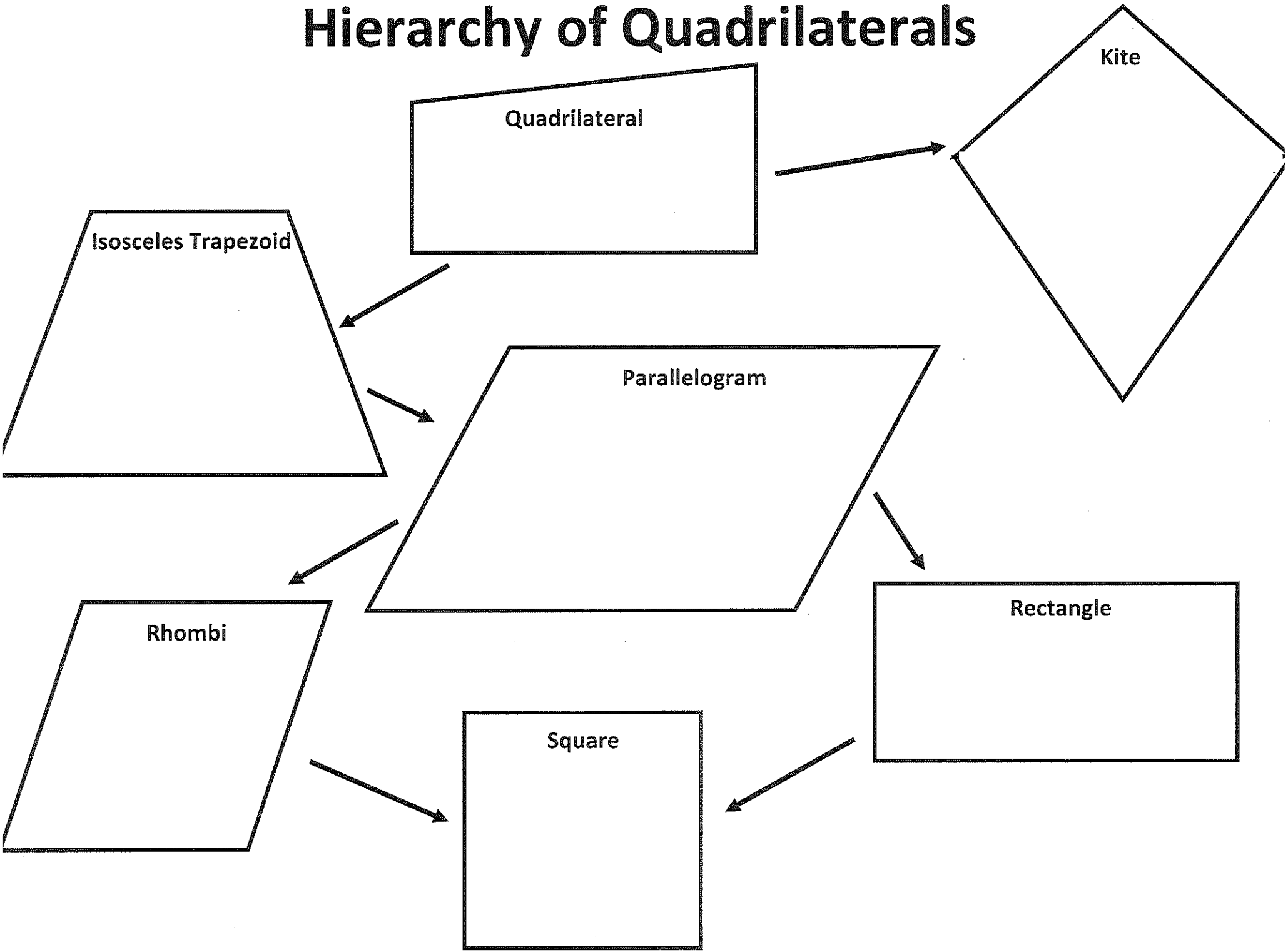
Remember this project is a Test Grade! ***Name:*** _____

Square *All Perimeters and Areas MUST be supported with the proper calculations!*	Object _____/1 Side Lengths (1 point for length, 1 for units)_____/2 Angle Measures (1 point for each pair labeled)_____/2 Blueprint Shape and Actual Shape Drawn _____/2 Scale Factor _____/1 Ratios of Sides and Ratio of Angles _____/2 Perimeter Equation: _____/1 Perimeter of Scale Model with correct units ____/2 Perimeter of Actual Shape with correct units _____/2 Ratio of Perimeters _____/1 Area of Scale Model with correct units ____/2 Area of Actual Shape with correct units _____/2 Ratio of Areas _____/1 Enlargement/Reduction _____/1	_____**/22**
Rectangle *All Perimeters and Areas MUST be supported with the proper calculations!*	Object _____/1 Side Lengths (1 point for length, 1 for units)_____/2 Angle Measures (1 point for each pair labeled)_____/2 Blueprint Shape and Actual Shape Drawn _____/2 Scale Factor _____/1 Ratios of Sides and Ratio of Angles _____/2 Perimeter Equation: _____/1 Perimeter of Scale Model with correct units ____/2 Perimeter of Actual Shape with correct units _____/2 Ratio of Perimeters _____/1 Area of Scale Model with correct units ____/2 Area of Actual Shape with correct units _____/2 Ratio of Areas _____/1 Enlargement/Reduction _____/1	_____**/22**
Kite *All Perimeters and Areas MUST be supported with the proper calculations!*	Object _____/1 Side Lengths (1 point for length, 1 for units)_____/2 Angle Measures (1 point for each pair labeled)_____/2 Blueprint Shape and Actual Shape Drawn _____/2 Scale Factor _____/1 Ratios of Sides and Ratio of Angles _____/2 Perimeter Equation: _____/1 Perimeter of Scale Model with correct units ____/2 Perimeter of Actual Shape with correct units _____/2 Ratio of Perimeters _____/1 Area of Scale Model with correct units ____/2 Area of Actual Shape with correct units _____/2 Ratio of Areas _____/1 Enlargement/Reduction _____/1	_____**/22**
Cover Page	Name, Company, Picture, Room you are creating _____/4	_____**/4**
2nd Page Total		_____**/70**

Remember this project is a Test Grade! *Name:*_____

Blueprint	Colorful layout with all **6 quadrilaterals** as furniture with reasonable scale model dimensions (2 points per object – **1 point dimensions, 1 point color**) _____/12	_____/12
Reflection	What did you enjoy most about this project? _____/1 What would you change? _____/1 What was the coolest thing that you **learned**? _____/1 How will you continue to use this information? _____/1 Where else are quadrilaterals used in real life? _____/1 **Typed, double spaced, no grammar/spelling errors, about 1 page** _____/2	_____/7
Who Am I? WS	Completed with an answer and reason why for all 7 descriptions (0.5 points per correct answer, 0.5 point per reason why)	_____/7
Hierarchy of Quadrilaterals WS	Completed notes sheet with all 7 quadrilaterals (0.5 points for each correct property, 0.5 points for note on Isosceles Trapezoid)	_____/12
Shape Finders WS	Completed table with all 7 quadrilaterals (0.5 points for correct drawings, 0.5 points for correct name, 1 point for properties)	_____/14
3rd Page Total		_____/52
1st Page Total		_____/66
2nd Page Total		_____/70
Total		_____/188 = _____%

Hierarchy of Quadrilaterals



Properties of Quadrilaterals

This task is designed to assist you to discover the properties of quadrilaterals.

You are reminded that in geometry lengths and angles that are equal in size are said to be 'congruent'.

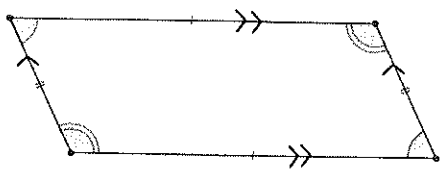
You are required to complete the following table:

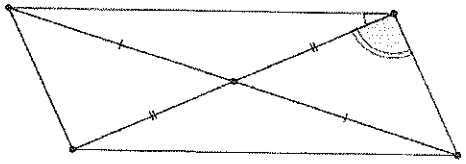
	Plain Quadrilateral	Trapezium (Isec. Trap.)	Parallelogram	Rectangle	Rhombus	Square	Kite
SIDE PROPERTIES							
Opposite sides parallel (How many pairs?)							
All sides congruent							
Opposite sides congruent (How many pairs?)							
Adjacent sides congruent (How many pairs?)							
ANGLE PROPERTIES							
All angles congruent							
Opposite angles congruent							
DIAGONAL PROPERTIES							
Diagonals congruent							
Diagonals bisect each other							
Diagonals perpendicular							
Diagonals bisect angles							

To aid your investigation work in small groups to draw examples of these shapes in *GeoGebra* and measure the unknown quantities.

When you have completed your table check it by viewing the following *GeoGebra* worksheets which appear below this worksheet in *GeoGebraWiki* .

For each of the special quadrilaterals draw two diagrams – one showing the side and angle properties and the second showing the diagonal properties. Diagrams for parallelogram are given as examples.





Trapezoid – Peer Edited Sheet

Object: _____

Scale Model Picture: (Label side lengths with measures and indicate congruency, heights, and angle measurements – use correct units!!)

Blueprint Shape: Actual Shape:

Scale Factor between blueprint picture and actual object: _____

Ratios of sides and angles: _____

Perimeter Equation: _____

Finding Perimeter of Shape: (show work and correct units)

Blueprint Shape: Actual Shape:

Ratio of Perimeters: _____

Area Equation: _____

Finding Area of shape: (show work and correct units)

Blueprint Shape: Actual Shape:

Ratio of Areas: _____

Was this an *enlargement* or a *reduction*? _____

Trapezoid – Final Grade

Object: _____

Scale Model Picture: (Label side lengths with measures and indicate congruency, heights, and angle measurements – use correct units!!)

Blueprint Shape: Actual Shape:

Scale Factor between blueprint picture and actual object: _____

Ratios of sides and angles: _____

Perimeter Equation: _____

Finding Perimeter of Shape: (show work and correct units)

Blueprint Shape: Actual Shape:

Ratio of Perimeters: _____

Area Equation: _____

Finding Area of shape: (show work and correct units)

Blueprint Shape: Actual Shape:

Ratio of Areas: _____

Was this an *enlargement* or a *reduction*? _____

Parallelogram – Peer Edited Sheet

Object: _____

Scale Model Picture: (Label side lengths with measures and indicate congruency, heights, and angle measurements – use correct units!!)

Blueprint Shape: Actual Shape:

Scale Factor between blueprint picture and actual object: _____

Ratios of sides and angles: _____

Perimeter Equation: _____

Finding Perimeter of Shape: (show work and correct units)

Blueprint Shape: Actual Shape:

Ratio of Perimeters: _____

Area Equation: _____

Finding Area of shape: (show work and correct units)

Blueprint Shape: Actual Shape:

Ratio of Areas: _____

Was this an *enlargement* or a *reduction*? _____

Parallelogram – Final Grade

Object: _____

Scale Model Picture: (Label side lengths with measures and indicate congruency, heights, and angle measurements – use correct units!!)

Blueprint Shape: Actual Shape:

Scale Factor between blueprint picture and actual object: _____

Ratios of sides and angles: _____

Perimeter Equation: _____

Finding Perimeter of Shape: (show work and correct units)

Blueprint Shape: Actual Shape:

Ratio of Perimeters: _____

Area Equation: _____

Finding Area of shape: (show work and correct units)

Blueprint Shape: Actual Shape:

Ratio of Areas: _____

Was this an *enlargement* or a *reduction*? _____

Rhombus – Peer Edited Sheet

Object: _____

Scale Model Picture: (Label side lengths with measures and indicate congruency, heights, and angle measurements – use correct units!!)

Blueprint Shape: Actual Shape:

Scale Factor between blueprint picture and actual object: _____

Ratios of sides and angles: _____

Perimeter Equation: _____

Finding Perimeter of Shape: (show work and correct units)

Blueprint Shape: Actual Shape:

Ratio of Perimeters: _____

Area Equation: _____

Finding Area of shape: (show work and correct units)

Blueprint Shape: Actual Shape:

Ratio of Areas: _____

Was this an *enlargement* or a *reduction*? _____

Rhombus – Final Grade

Object: _____

Scale Model Picture: (Label side lengths with measures and indicate congruency, heights, and angle measurements – use correct units!!)

Blueprint Shape: Actual Shape:

Scale Factor between blueprint picture and actual object: _____

Ratios of sides and angles: _____

Perimeter Equation: _____

Finding Perimeter of Shape: (show work and correct units)

Blueprint Shape: Actual Shape:

Ratio of Perimeters: _____

Area Equation: _____

Finding Area of shape: (show work and correct units)

Blueprint Shape: Actual Shape:

Ratio of Areas: _____

Was this an *enlargement* or a *reduction*? _____

Rectangle – Peer Edited Sheet

Object: _____

Scale Model Picture: (Label side lengths with measures and indicate congruency, heights, and angle measurements – use correct units!!)

Blueprint Shape: Actual Shape:

Scale Factor between blueprint picture and actual object: _____

Ratios of sides and angles: _____

Perimeter Equation: _____

Finding Perimeter of Shape: (show work and correct units)

Blueprint Shape: Actual Shape:

Ratio of Perimeters: _____

Area Equation: _____

Finding Area of shape: (show work and correct units)

Blueprint Shape: Actual Shape:

Ratio of Areas: _____

Was this an *enlargement* or a *reduction*? _____

Rectangle – Final Grade

Object: _____

Scale Model Picture: (Label side lengths with measures and indicate congruency, heights, and angle measurements – use correct units!!)

Blueprint Shape: Actual Shape:

Scale Factor between blueprint picture and actual object: _____

Ratios of sides and angles: _____

Perimeter Equation: _____

Finding Perimeter of Shape: (show work and correct units)

Blueprint Shape: Actual Shape:

Ratio of Perimeters: _____

Area Equation: _____

Finding Area of shape: (show work and correct units)

Blueprint Shape: Actual Shape:

Ratio of Areas: _____

Was this an *enlargement* or a *reduction*? _____

Square – Peer Edited Sheet

Object: _____

Scale Model Picture: (Label side lengths with measures and indicate congruency, heights, and angle measurements – use correct units!!)

Blueprint Shape: Actual Shape:

Scale Factor between blueprint picture and actual object: _____

Ratios of sides and angles: _____

Perimeter Equation: _____

Finding Perimeter of Shape: (show work and correct units)

Blueprint Shape: Actual Shape:

Ratio of Perimeters: _____

Area Equation: _____

Finding Area of shape: (show work and correct units)

Blueprint Shape: Actual Shape:

Ratio of Areas: _____

Was this an *enlargement* or a *reduction*? _____

Square – Final Grade

Object: _____

Scale Model Picture: (Label side lengths with measures and indicate congruency, heights, and angle measurements – use correct units!!)

Blueprint Shape: Actual Shape:

Scale Factor between blueprint picture and actual object: _____

Ratios of sides and angles: _____

Perimeter Equation: _____

Finding Perimeter of Shape: (show work and correct units)

Blueprint Shape: Actual Shape:

Ratio of Perimeters: _____

Area Equation: _____

Finding Area of shape: (show work and correct units)

Blueprint Shape: Actual Shape:

Ratio of Areas: _____

Was this an *enlargement* or a *reduction*? _____

Kite – Peer Edited Sheet

Object: _____

Scale Model Picture: (Label side lengths with measures and indicate congruency, heights, and angle measurements – use correct units!!)

Blueprint Shape: Actual Shape:

Scale Factor between blueprint picture and actual object: _____

Ratios of sides and angles: _____

Perimeter Equation: _____

Finding Perimeter of Shape: (show work and correct units)

Blueprint Shape: Actual Shape:

Ratio of Perimeters: _____

Area Equation: _____

Finding Area of shape: (show work and correct units)

Blueprint Shape: Actual Shape:

Ratio of Areas: _____

Was this an *enlargement* or a *reduction*? _____

Kite – Final Grade

Object: _____

Scale Model Picture: (Label side lengths with measures and indicate congruency, heights, and angle measurements – use correct units!!)

Blueprint Shape: Actual Shape:

Scale Factor between blueprint picture and actual object: _____

Ratios of sides and angles: _____

Perimeter Equation: _____

Finding Perimeter of Shape: (show work and correct units)

Blueprint Shape: Actual Shape:

Ratio of Perimeters: _____

Area Equation: _____

Finding Area of shape: (show work and correct units)

Blueprint Shape: Actual Shape:

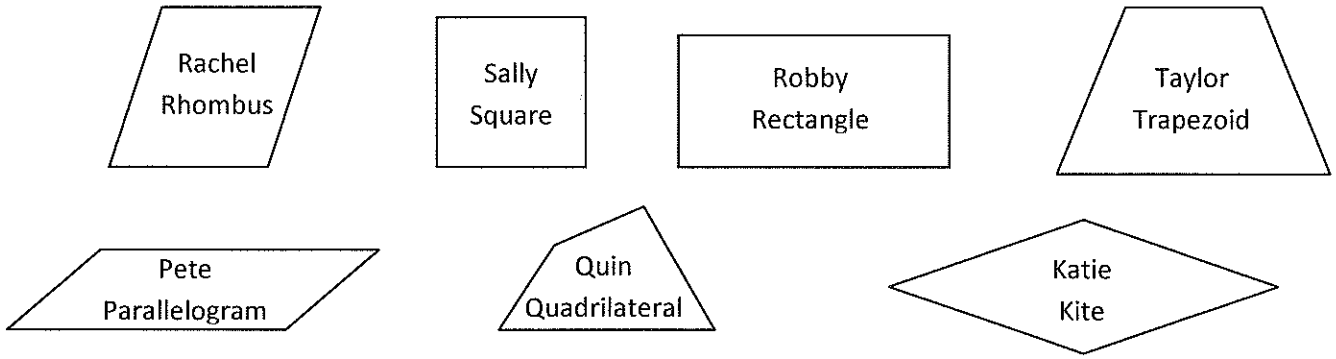
Ratio of Areas: _____

Was this an *enlargement* or a *reduction*? _____

Name: _____

Hour: _____

Who Am I?



Oh no! Seven quadrilaterals are planning a trip to the Bermuda Triangle together and their passports got all mixed up! The worst part? They hadn't written their names in the passports or taken their pictures. So, only their characteristics exist on the passports. Help us identify which passport belongs to which quadrilateral so they are able to go on their adventure.

---

1. I'm always as wide as I am tall. I am always right in my angle on life.

2. I am usually wide or tall, am always right in my corners, and my opposite sides are always the same and running in the same direction.

3. I always put my equal sides next to each other. I love to fly high in the sky with my opposite congruent angles.

4. My opposites are always agreeing to the same thing, yet I still end up slightly slanted in my viewpoint. No matter what I keep my sides even and equal.

5. I'm usually on a tilt, always ready for a race with my opposite sides and angles congruent. Yet, I can be really tall or really wide depending on how much I train for my race.

6. My head is usually smaller than my hips, but my two arms are always the same size. My skirt has equal angles on the bottom, as are my shoulders. My head is in line with my hips.

7. My sides and angles are very free spirited and can do whatever they want. I am working with CSI as an undercover agent since I can morph into whatever other quadrilateral is around me.

Name: _____

Reflection Guide

Take some time to reflect on your project as a whole. Use the questions below to guide you in writing your reflection paper. (**Make sure it is typed double spaced with no grammar or spelling errors, about 1-2 pages**)

1. What did you enjoy most about this project?

2. What would you change?

3. What was the coolest thing you learned?

4. How will you continue to use this information?

YOU RECEIVE A *ZERO* ON THIS PART OF THE PROJECT IF YOU DO NOT TYPE UP A 1 PAGE PAPER.

Make sure paper is typed double spaced with no grammar or spelling errors, about 1 page

Name: _____

Reflection Guide

5. Where else are quadrilaterals used in real life?

Make sure paper is typed double spaced with no grammar or spelling errors, about 1 page