## **Doghouse Design Project**

**The challenge:** Design a doghouse for a specific breed of dog so that it can live comfortably outside in all weather conditions.

# **Minimum Design Requirements:**

- Protection from the elements
  - o Wind
  - o Water
  - o Heat
  - o Cold
- Space to move about inside
- Doorway or opening large enough for the adult dog to fit

# Other things to consider:

- Aesthetic appeal of the doghouse
- Approximate cost (high/medium/low)

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## Part 1 – Research

Come up with the general specs for your doghouse. Pick a breed of dog and look up how big they can get. Find out what size crate they would need and how big the entrance to your doghouse should be. At a minimum you should have the interior height, width, and depth as well as the height and width of your entrance.

Then, look up at least two designs that would fit your dog and compare their prices and features. Look for one high priced one and one low priced one. Compare and contrast the options and come up with reasons why you think there is a price difference. Use that to come up with an estimated cost for your design.

Provide at least two links, to show your research.

## Part 2 – Rough/Design Sketch

Come up with a rough draft plan and lay out things like dimensions on the drawing. You can use any of the sketching methods we learned about to do this. This drawing will help you in laying out the final plan. You must create a rough sketch of your floor plan, outside view (elevation), and annotate all drawings (materials used and dimensions.)

#### Part 3 - Floor Plan

Draw a floor plan for your doghouse to a determined scale. You must decide what the scale of this drawing will be. It will be drawn using drafting equipment on 8.5"x11" sheet of printer stock (paper). It will have a title block and its drawing number should say "PART 3". Walls must have thickness, use 3" (to account for siding and insulation) or use a thickness appropriate to your materials. Any windows need to be indicated on the floor plan. If there is a door that opens and closes, it needs to be indicated on the floor plans. How the doghouse is heated should be noted on your floorplan.

#### Part 4 - Elevation View

Draw the front view of your doghouse. Instead of using hidden lines, this view should show details like siding, decorations, etc. Look up elevation views of houses for examples. This view should be to scale on an 8.5"x11" sheet of printer stock (paper). It will have a title block and its drawing number should say "Part 4".

**Extra Credit (5pts):** Draw a detailed pictorial (isometric or 2pt perspective) with appropriate proportions. Include a title block. May not use grid paper for this.

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### What to turn in:

Complete each part and assemble them into a report.

- Cover Page: Create a cover page with the title of your doghouse, your name, this class, teacher, period, and date.
- Table of Contents: List the page number for each section of your project.
- Part 1 Research: Print out your research document
- Part 2 Rough/Design Sketch: Arrange your sketches and planning drawings neatly
- Part 3 Floor Plan: Add your completed floor plan
- Part 4 Elevation View: Add your completed elevation view
- (optional) Pictorial Drawing
- Grading Sheet: print and attach at the end of your project

**Timeline** (This is an estimate, use this to help gauge your progress.)

- 1 day Research and Rough Sketch
- 1.5 day Floor Plan
- 1.5 days Elevation View
- .5 Putting it all together
- .5 final checks and last-minute changes

Total: 1 week – Due Friday (03/16/18)

Grading Sheet:
/10 Cover Sheet and Table of Contents
Comments:
/20 Research: Complete, thorough, organized, and includes sources.
Comments:
/10 Rough/Design Sketch(s): Neat, clearly communicate the design, include dimensions.
Comments:
/30 Floor Plan: Neat, to scale, detailed, follows drafting conventions.
Comments:
/30 Elevation View: Neat, to scale, detailed, follows drafting conventions.
Comments:
Total:/100