

Math 304-Measurement Project

Scoring Criteria –Turn this sheet in with each Part.

| <i>Type of Evidence</i> | Points earned/possible |
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| Part I - Due July 18th | |
| 1. Shed Research | /3 |
| a. Turn in 3 pictures/sketch of sheds. You may take one from an advertisement, the other two are to be actual sheds you have photographed or sketched. | |
| b. Type up a description of <u>each</u> shed listing dimensions of the actual sheds. Include the pitch of the roof and door size for each shed. | /7 |
| c. Select a grade level (between 1 st – 6 th) and identify the geometry & measurement standards (list the #) & benchmark (type out the part of the benchmark addressed in the shed research. See course website for link to math standards. | /5 |
| Part II - Due July 23rd | |
| 2. Make <u>Four drawings</u> of a sloped roof shed of your choice: | |
| a. 3-D drawing with hidden edges | /15 |
| b. a side view | |
| c. a top view | |
| d. a front view | |
| 3. Label the actual shed's <u>dimensions</u> , <u>pitch</u> , and used <u>scale</u> on each of the your drawings. | /5 |
| 4. Construct a <u>model</u> of your shed, if you choose to use a different scale than you had listed in your drawings attach your new scale. | /10 |
| (Up to 5 bonus points possible when your model includes extra details, such as scale furniture, shingles, siding, or other creative features that make your shed into a playhouse) | |

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|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------|
| Part III - Due Aug. 1st | |
| 1. Included Stages I & II with any corrections required. | /5 |
| 2. Calculate the surface area of the model and actual shed. | /10 |
| 3. Calculate the volume of the model and the volume of the actual shed. | /10 |
| 4. Type up the following descriptions: <ul style="list-style-type: none"> a. How the linear scale factor relates to the surface area of the model compared to the actual shed. b. How the linear scale factor relates to the volume of the model compared to the actual shed. c. Visually explain how your linear scale factor relates to the area and volume. | /10 |

See Math 304's website for examples and more details