Directions:

For this *Activity* you will read and interpret the given foundation plan and estimate the amount of material needed to frame the floor.

1. Estimate the amount of girder material needed.

Refer to the detailed plan to determine the size of material and amount per girder (Triple 2x10 Pressure Treated) (girders are labeled as 2X10 Wolmanized® Girders). Add up the total linear footage of the girders.

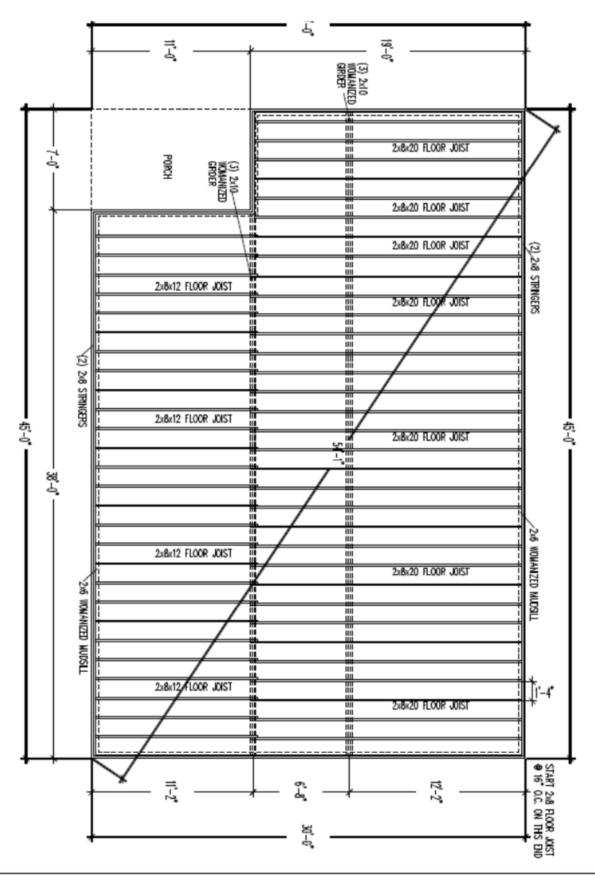
2. Estimate the amount of header material and outside joist material needed. Refer to the detailed plan to determine the size of material and linear footage.

Estimate the amount of material needed for the floor joists.
Refer to the detailed plan to determine size of material and linear footage.

4. Add the overall amounts of 2x8's together. Estimate 10% for waste.

5. Add 10% waste to the amount of girder material needed. Total the amount.

- 6. Estimate the area of the subfloor.
 - Divide by the square footage of coverage in a 4'x8' sheet of tongue and groove plywood or OSB. Add 10% for waste. Round up to the nearest whole number and give the total number of sheets needed to deck the floor.



7. Research available products such as TJI joists of Laminated Veneer Lumber materials and provide options for customers based on your research.

For example, what advantage would there be to use engineered lumber versus dimensional lumber for the floor joists? What products are available to use for the girders other than dimensional lumber, and what advantages would be seen? Report your findings to the class