PRE-CALC & TRIG

Day 60

Bell Work:

Last Minute Touch Ups to Bridge Project

Bridge Project Last Day

We will be testing bridges.

Formal Write Up should be turned in as you bring your bridge to front of the room for testing.

Grades

- Formative:
  - *Turn in blueprints. Clearly defined roles. Build completed on time. Appropriate use of class time.*

- Summative:
  - *Build was true to scale.*
    Weight supported
    Formal Write – Up

Objective

- To build a bridge that covers the required gap, holds the most weight, and follows your groups blueprints and measurements.
- Document your groups process for a summative paper/write up.

Bridge Project

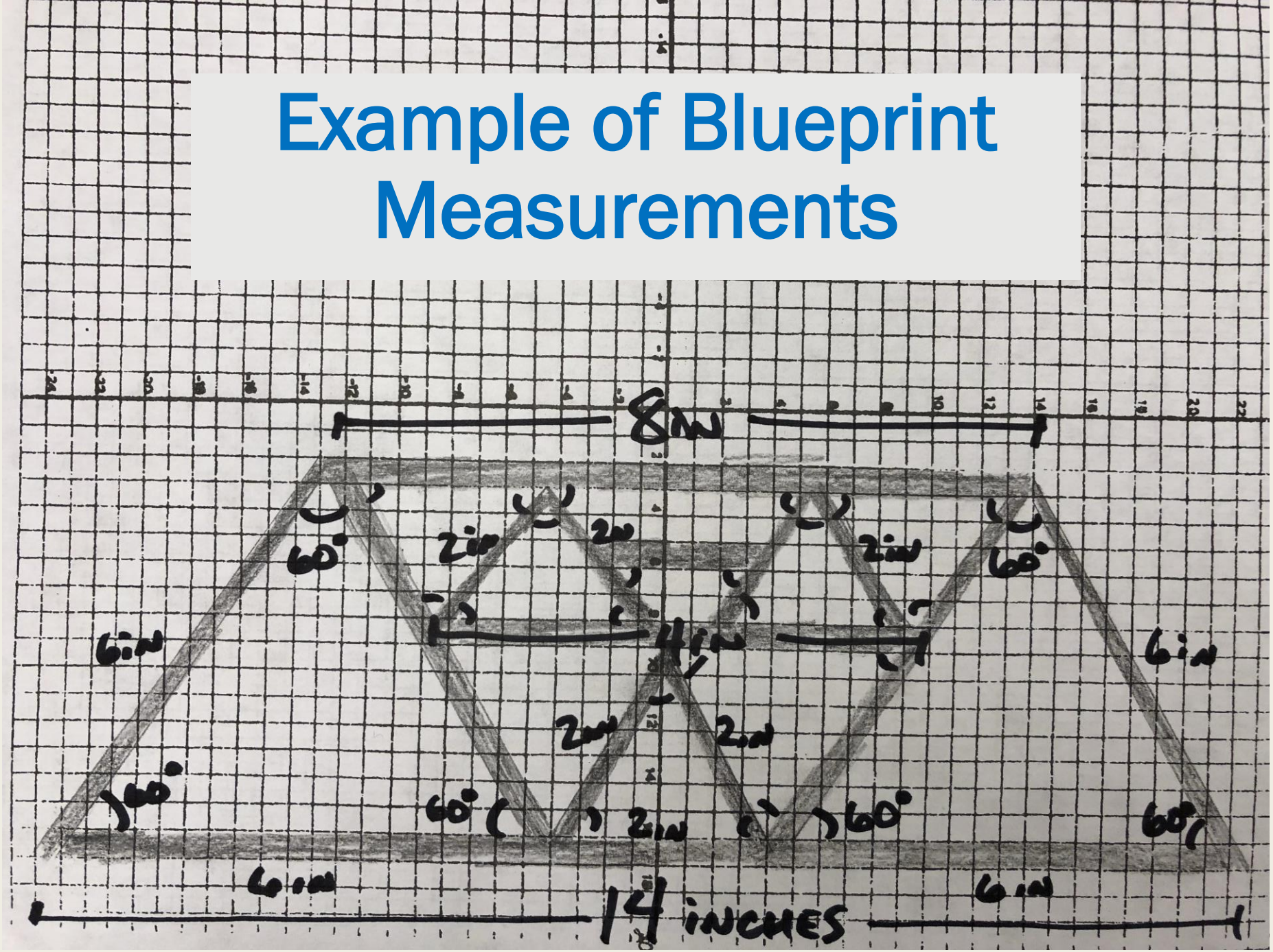
- You'll be in groups of 3 – 4
- This project will involve some research, drafting, constructing, and testing
  - *Pick your groups wisely*

Overview

- You will need blueprints for the side view of your bridge
  - *Include both length measurements, and angle measurements.*

- Additional consideration given if you map out a blue print for the top/bottom and front/back

Example of Blueprint Measurements



Bridge Requirements

- The bridge must span a gap of 14 inches (it can be longer if desired)
- The bridge must allow a ‘car’ with a width of 3 – 4 inches to drive over it
- The bridge must have a hole with a diameter of 0.5 inches in the center to attach the bucket
- Only use the allowed materials (outlined on next slide)

Materials Allowed

- Less than or equal to 200 popsicle sticks
- Less than or equal to 2 rubber bands
- Less than or equal to 4 index cards
- Elmer’s Glue (provided)
- Graph Paper for blue prints is encouraged

Schedule

Day 1:

- *Research & Design Bridges. Assign Roles. Get Angle & Side Measurements. Begin Build*

Day 2:

- *Continue Building & Finding Angle and Side Measurements if needed.*

Day 3:

Final Build Day. Finalize builds and mathematics

Day 4:

Test Bridges.

Finish write-ups

Formal Write – Up

- Daily Accomplishments/plans stated.
- Clearly defined roles within the group
- Summarize patterns within the length and angles used in building the bridge.
- Defend why you built the bridge the way that you did (cite any sources used to help with research)
- Attach blueprints