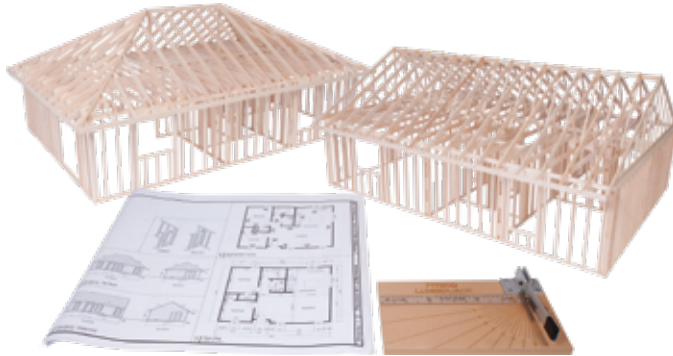


True Scale House Framing Kit

Grades 6+ | Students Served: 24 (teams of 4)

MIDDLE LEVEL

HIGH SCHOOL



Essential Questions

What are the building standards for wood frame construction?

How can the basic knowledge of construction be applied to other disciplines?

Why is the ability to measure accurately essential in the construction trades?

Career Connections:

- Framer
- Architect
- Carpenter
- Construction Manager

STEM Connections

Science

- Static forces
- Materials science

Technology

- Design processes
- Criteria and constraints

Engineering

- Modeling
- Civil engineering

Math

- Angles
- Measurement
- Computations



WARNING: Drilling, sawing, sanding, or machining wood products can expose you to wood dust, a substance known to the state of California to cause cancer. Avoid inhaling wood dust or use a dust mask or other safeguards for personal protection. For more information, go to www.P65Warnings.ca.gov/wood.



Sample Activity

The Truth in a True Scale House Challenge

Prior to building the True Scale House, students research the two roof options, gable and hipped, to draw conclusions on which type is better.

Discussion

- Which type of roof do you think is preferable to the house's inhabitants?
- Does the environment the house is in determine which roof is better? Why so?
- Which design of roof is more inexpensive? Is the cost savings worth it?