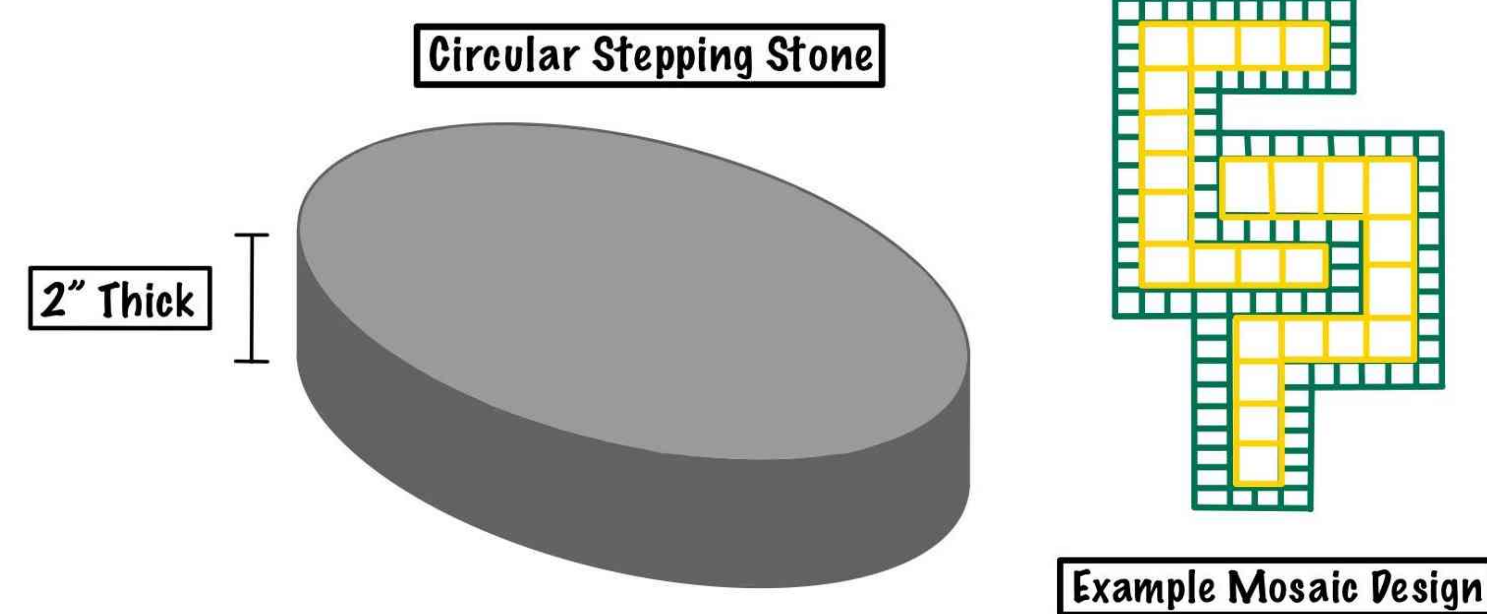
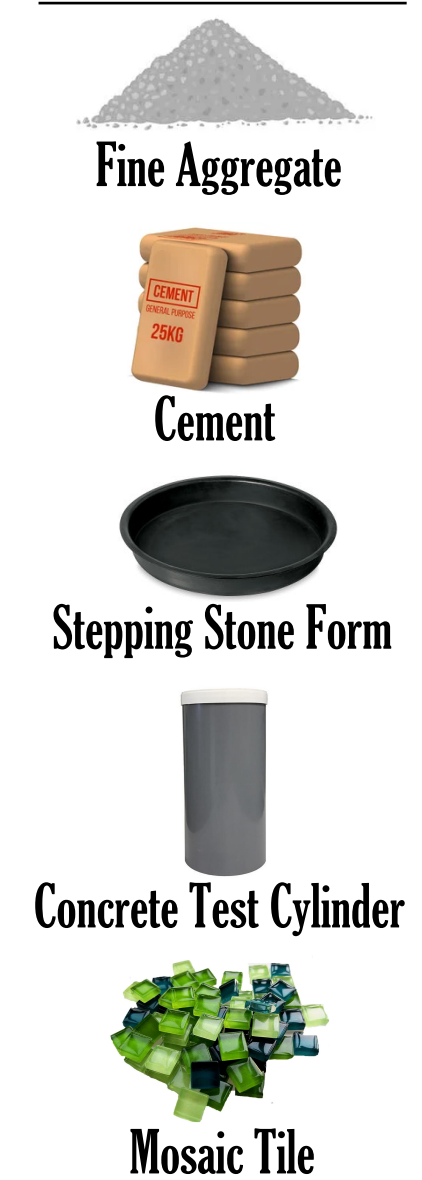


CAL POLY CONSTRUCTION SUMMER CAMP 2022

Materials Needed:



Learning Objectives:

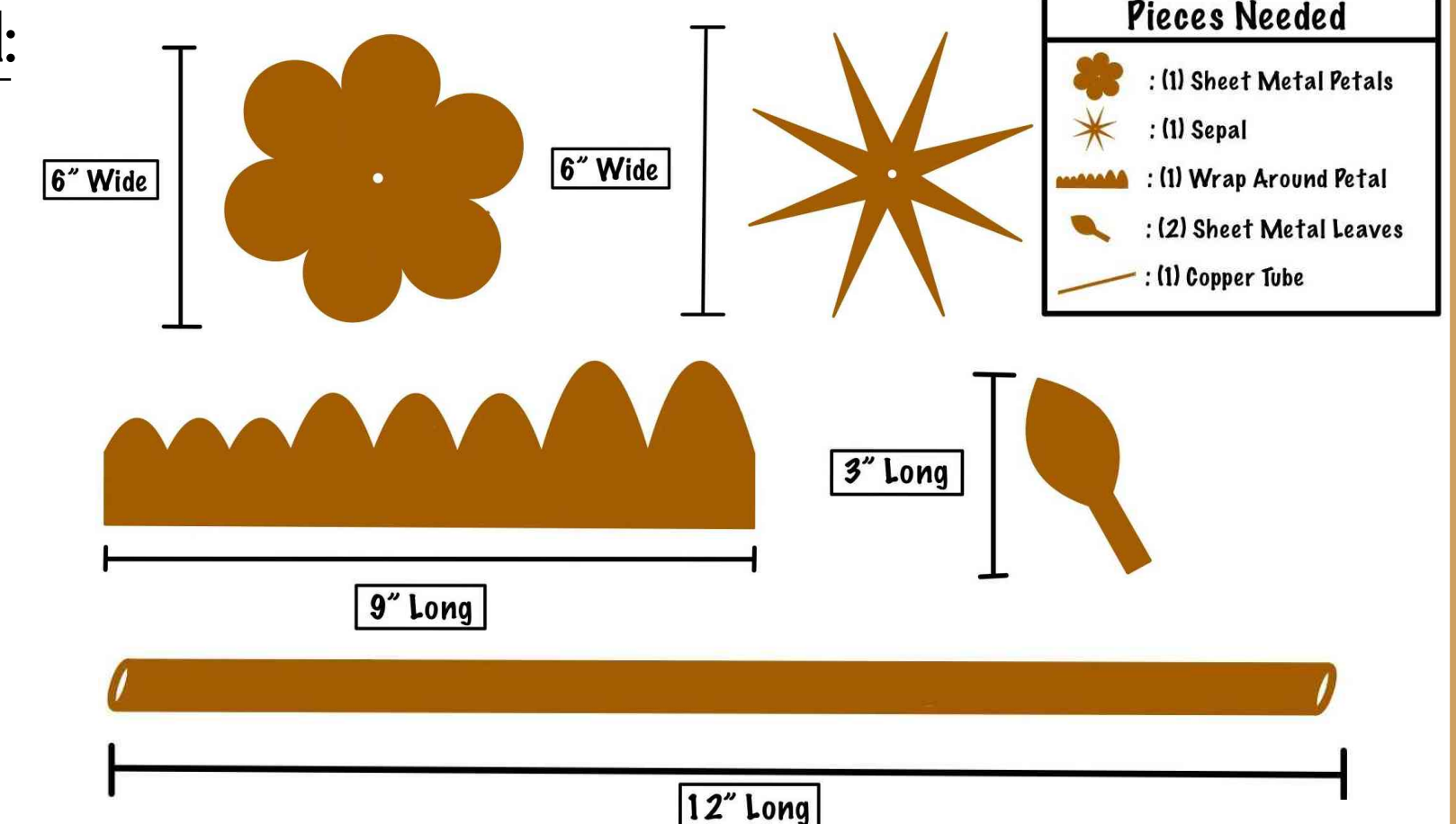
1. Be able to follow a mix design.
2. Identify the range for compressive strength to be able to gauge when the test cylinder will break under pressure.
3. Identify uses of concrete in building construction.

Concrete | Stepping Stones | Cylinder Break Test

ASHLEY ISLA

Within the construction industry, it seems there are not enough young adults entering the trades. I believe the root of the problem stems from high school students being unaware of the opportunities the construction industry brings. For example, most high school students believe their only options after graduation are college, work, or the military. To make young adults aware of these professions, my teammates and I have curated a Cal Poly Construction Summer Camp. This camp will take place summer of 2022. It will be a week-long camp (5 days, 8 hours per day) where freshman to senior high school students will have the opportunity to learn about various trades, construction technology, safety practices, tool trainings, teamwork, and how to go to trade school. My scope is developing specific activities for each day. For example, on concrete day, the activity is pouring concrete stepping stone and performing a break test. I have planned the logistics of these activities like durations, estimated costs, layout, potential sponsors, and steps to complete the project.

Materials Needed:

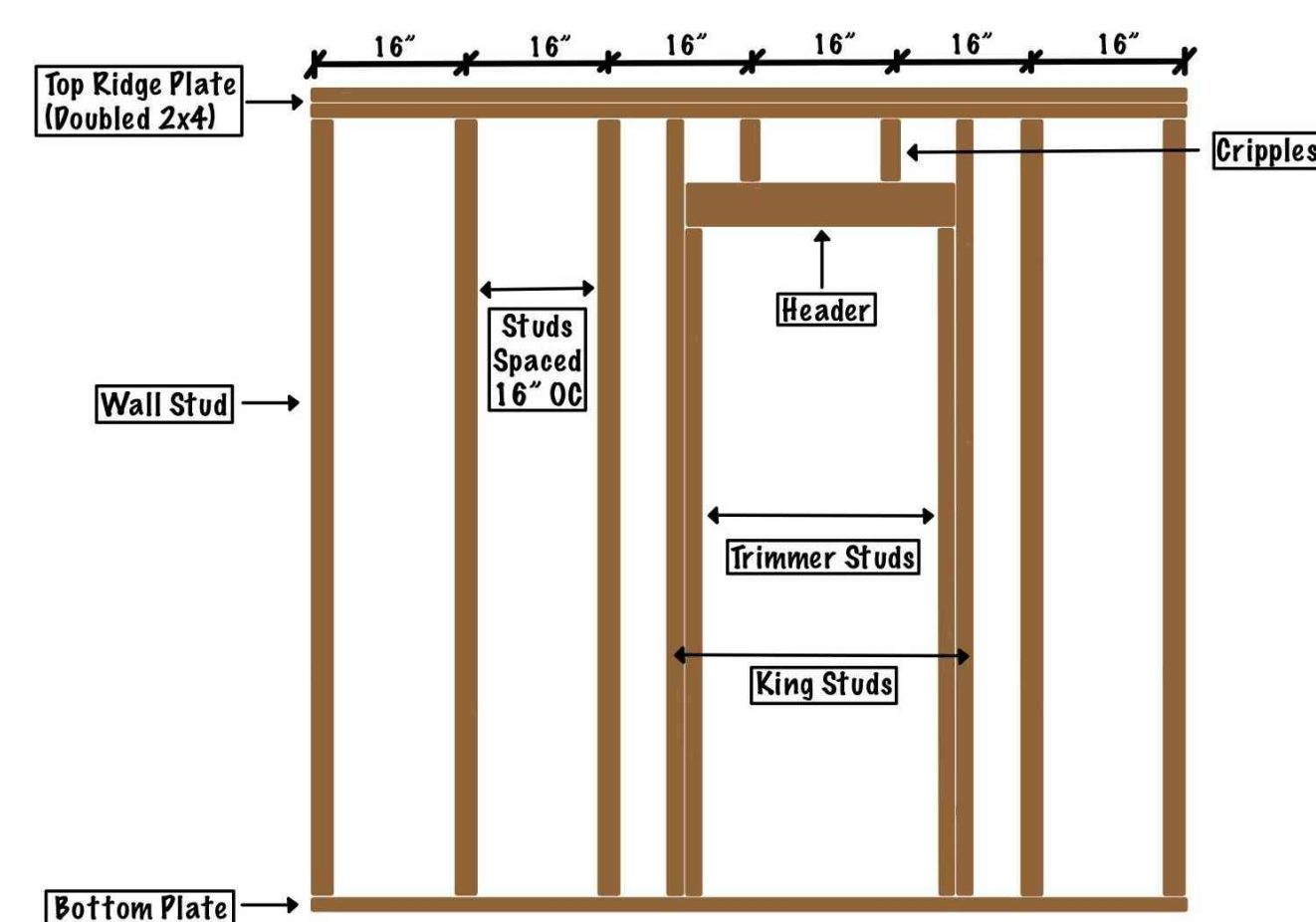


Learning Objectives:

1. Demonstrate safe and correct use of torch, flux, and solder wire.
2. Identify uses of sheet metal in residential and commercial construction.
3. Become familiar with hand tools (nose needle pliers).

Sheet Metal | Sheet Metal Roses

Materials Needed:



Learning Objectives:

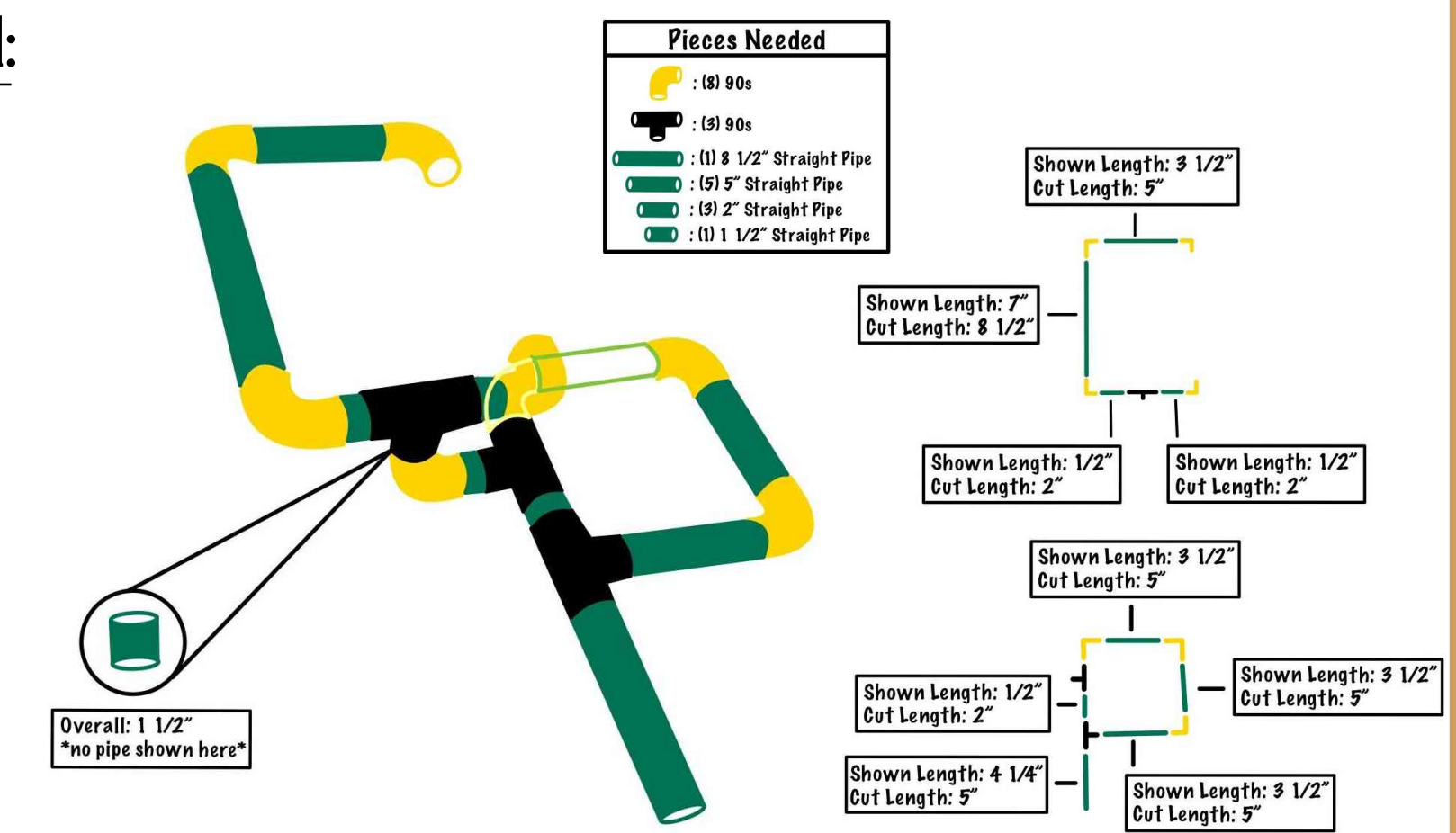
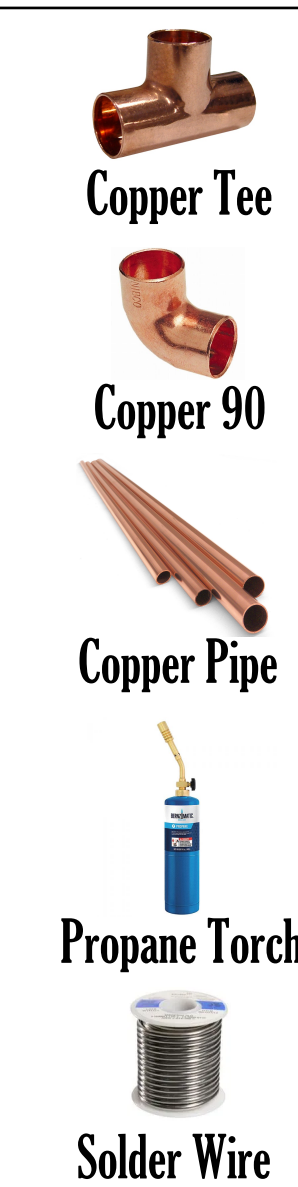
1. Describe the uses of a miter saw and demonstrate safe operation of a miter saw.
2. Build a three-dimensional object based on two-dimensional drawings.
3. Assemble wall framing using correct materials in the correct order.

Carpentry | Wall Framing Competition

POTENTIAL SPONSORS



Materials Needed:



Learning Objectives:

1. Identify copper pipe uses in building construction.
2. Be able to layout material and connect them in the correct order.
3. Demonstrate ability to make connections between copper pipe and fittings.

Plumbing | Copper Pipe "CP"

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CAL POLY