

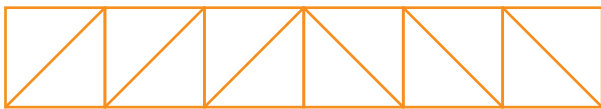
# BRIDGE BUILDING PROJECT

## DIRECTIONS

Build each bridge by using the following diagrams.

1. Using rubber bands, bunch pieces of spaghetti into groups of 10 in order to form your building materials.
2. Choose the type of truss you want to use. Then, cut your spaghetti bunches to different lengths to match each piece of the bridge. Remember to create enough building materials for two trusses and a bridge base.
3. Once you've sized your materials, use a hot glue gun to bind the strands of spaghetti in each bunch together by gluing the end of each bunch. When the glue is dry, remove the rubber bands.
4. Assemble your bridge's base and trusses by using your hot glue gun to assemble your building materials.
5. When your base and trusses are complete, glue both trusses to either side of the base.

### BRIDGE BASE DIAGRAM



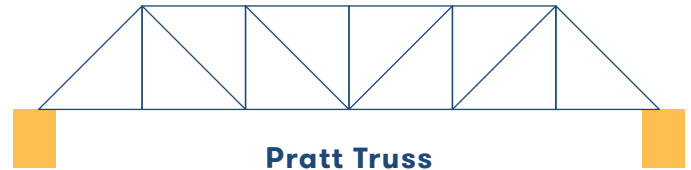
Each bridge will consist of one base and two trusses.

## SUPPLIES NEEDED

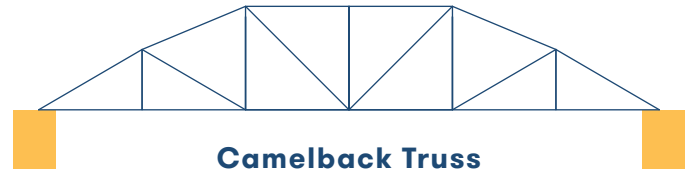
- Uncooked spaghetti
- Hot glue gun
- Pen/pencil
- Ruler
- Paper
- Rubber bands

## TIP

Suspend your bridge by placing it on top of two stacks of books. Place materials on the bridge until it breaks to see which design is the strongest!



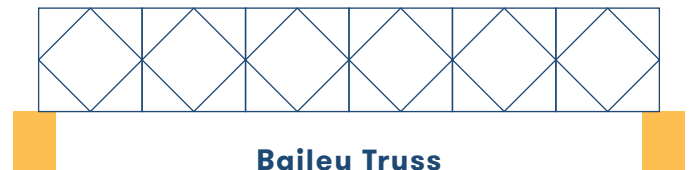
Pratt Truss



Camelback Truss



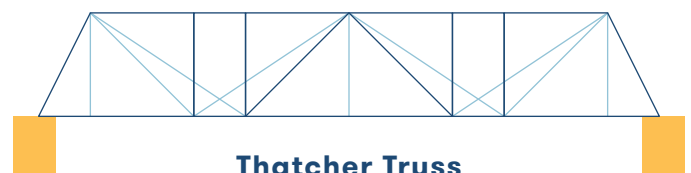
Baltimore Truss



Bailey Truss



Pennsylvania Petit Truss



Thatcher Truss