

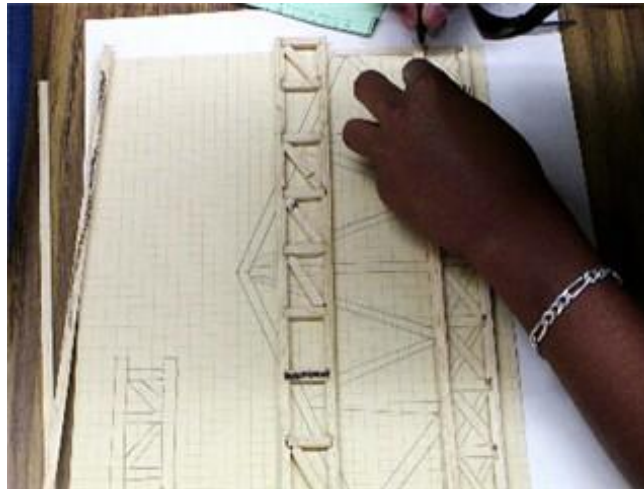
Engineering (Bridge) Construction Pictures



Gluing the substructure and cross trusses together.

Each student team is given 20'0" of wood to complete their model bridge. That may seem like a large amount of wood, but it isn't. The bridge must measure 12" long and the roadbed, be at least 4" tall, and 3½" wide. Because of these criteria, it is important that each team uses their wood wisely.

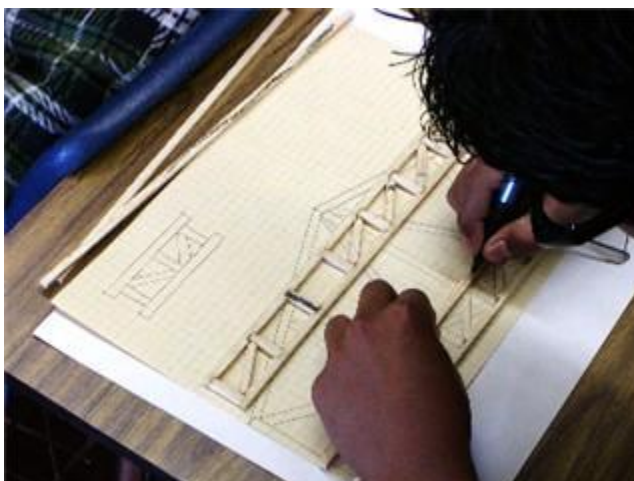
Students glue their bridges together on top of the poster board so that their bridges don't stick to the desks. It also allows for them to tape their structure down which help the pieces to stay together and dry in one piece.



Measuring and marking pieces to be cut.

The students use their final drawing (which is drawn full scale) to correctly measure and mark the pieces so they can cut them at the correct lengths using the scroll saw.

This student is marking "notched joints" to be used to construct his team's bridge. Notched joints help to make the bridge stronger.



More measuring and marking.

You can see one of the completed substructure pieces above the piece that is being marked. This substructure has been measured, marked, cut, assembled and glued.

At the top of the student's desk, you can see two of the wood pieces that each team gets. Each piece of wood is ¼" by ⅛" by 2'0" long. Ten, 2'0" pieces of wood are given to each team which makes up the 20'0" of wood.