

Grand Canyon Stream-Table Model Construction (Teacher Master)

In part 1, students used a canyon stream-table model to demonstrate how water in spray bottles—representing snowmelt and rain in the mountains—forms streams and side canyons. In part 2, students will use drip systems to make a “river” flow through the canyon model. This model is intended to demonstrate how water carries sediment (sand and soil) out of the canyon through the river channel.

Materials

- Styrofoam block (1 per model)
- Knife
- Small blowtorch
- Spray paint (red or brown)

1. Place the Styrofoam block on a hard surface. With a knife, make a slight indentation in the Styrofoam as an outline for the river.
2. Using the blowtorch, carve along the outline to make the riverbed. The indentation should be shallower at one end and become increasingly deeper to illustrate erosion. (**Note:** Since gas is released when Styrofoam is heated, perform this step outside or in a well-ventilated area.)
3. Spray brown paint on the finished model and apply dirt to add texture.

