

## Cascade Volcanoes Mobile

## A String of Volcanoes

The Cascade Volcanoes extend from British Columbia (Canada) to northern California (USA). To learn more about them, make a string of volcanoes using the "String of Volcanoes" mobile templates which can be downloaded from the U.S. Geological Survey Cascades Volcano Observatory website at http://vulcan.wr.usgs.gov/Outreach/VolcanoMobiles and copied on to heavy paper. Use the internet to research each volcano - http://vulcan.wr.usgs.gov is a good place to start. Hang the "String of Volcanoes" mobile in your home or classroom.

**Materials**: glue, scissors, string or yarn, cardboard or stiff paper, markers or crayons for coloring, paperclips, internet access or other resources, and String of Volcanoes mobile pieces.

## **Instructions:**

- 1. Print answers to questions on each volcano.
- 2. Color the volcanoes (most are snow capped, most have trees, some have lakes or meadows).
- 3. Cut out along outline and fold each piece in half along dotted line.
- 4. Cut out small black "\( \Lambda \)" along bottom (folded) edge.
- 5 Assemble mobile starting at top with title piece, followed by state map and then volcanoes. You can hang volcanoes in one long string or hang a cardboard triangle horizontally below the title and hang a states from each corner. Each side of triangle should be about 10 inches long.
  - A. For **single-string hanging**, cut a 14 foot long piece of string and make an 7 inch long loop to extend from center top of title piece. Run excess string through hole in center bottom of title piece and tie a knot just below bottom of title piece. Glue string in place and glue title piece closed
  - B. On the back side of the next piece, run a glue line around edges and down the center.
  - C. Using the hole you cut in bottom (folded) edge, slide the piece onto the string, glue side up. Place it 2 inches below the bottom of the previous piece.
  - D. Press the piece closed and adjust on string for balance and location. Tie a knot in string at bottom of piece. Make sure the string is glued in place.
  - E. Repeat steps B through D for each piece of the mobile.
  - F. Below bottom piece tie a large knot and trim off excess string.
  - G. Balance mobile by adding weights inside individual volcanoes.

## **Options** -

For **side-by-side hanging** Cut 3 pieces of string 5 1/2 feet long. Make a 7 inch long loop in one piece for hanging. Tie all 3 strings together at the bottom of the loop. One piece will now be shorter than the others - use this string for California. Run the 3 pieces of string through the hole in the bottom of title piece, glue the sting in place and glue title piece closed. Tie a knot below the title. Punch a small hole in each corner of triangle for state maps and volcanoes. Suspend triangle 3-4 inches below title by running each string through a different hole. Knot each string below triangle (try to keep triangle hanging evenly). Follow instructions B through G to hang state maps and volcanoes from each corner.

Is Mount St. Helens north or south of Mount Adams? Since they are at almost the same latitude you may want to hang them side by side. If so, cut two small "A"s in the bottom of Mount Rainier (one on each side about ½ inch in from edge). Cut two 1-foot pieces of string and tie knots in the top of each. Pull string through new holes and secure knot inside with glue. Hang Mount St. Helens and Mount Adams on strings as shown in steps B through G.

**Hint:** The knots you tie help support pieces incase glue doesn't hold. If you make big holes you will need to tie big knots (which uses more string) or tie the knots around matchsticks.

