

Notes: Five Thunderstorm Hazards

name: _____

1. _____

a. If there is a 5-second difference between the sight of lightning and the sound of its thunder, how far away was the lightning? _____

b. Why might lightning blow your shoes off? _____

c. Which state gets the most lightning? _____

d. What did Ben Franklin prove? _____

e. What did he invent? _____

2. _____ (see diagram and explanation on back)

a. What happened in Glasgow, MT on June 16, 2007? _____

b. When and where was the most expensive hailstorm in the history of Montana? _____

3. _____

4. _____

What is a microburst/downburst? _____

a. _____

b. _____

c. _____

5. _____

a. In 1903 a flash flood swept through Heppner, Oregon, killing 283 people. What caused this? _____

b. What was done in Heppner to prevent this from ever happening again?

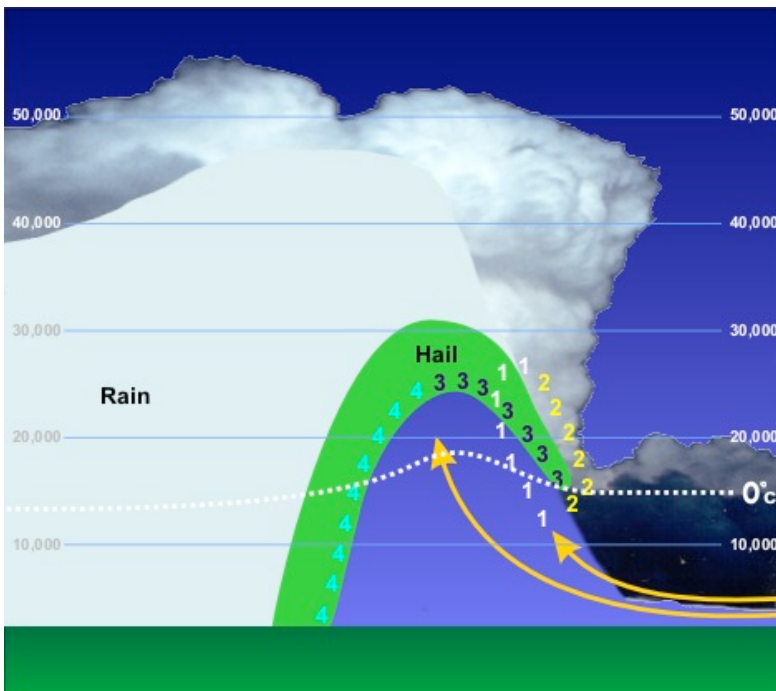
c. What happened in Big Thompson Canyon in 1976? (~3,000 people were in the canyon)

From 7:30 to 8:40 pm _____

A wall of water _____ ft. high came through the canyon at _____ mph.

_____ People were killed and _____ homes were destroyed.

Below: This is how hail forms. Read the steps below the diagram.



This rain-free region is produced by the updraft and is what suspends rain and hail aloft.

1. The hail nucleus, buoyed by the updraft is carried aloft by the updraft and begins to grow in size as it collides with supercooled raindrops and other small pieces of hail.
2. Sometimes the hailstone is blown out of the main updraft and begins to fall to the earth.
3. If the updraft is strong enough it will move the hailstone back into the cloud where it once again collides with water and hail and grows. This process may be repeated several times.
4. In all cases, when the hailstone can no longer be supported by the updraft it falls to the earth. The stronger the updraft, the larger the hailstones that can be produced by the thunderstorm.

To review, especially if you were gone, go to bengalfrosh.com to access Benson's site. Select Unit 4 and then click on the links to watch everything that is posted.