



Monadnocks and Waterfalls-Explore Outdoors

Name: _____

Hanging Rock is a monadnock formed from millions of years of weathering and erosion. At the highest elevations of the park, much bare rock is exposed. Go outside and create a model of an ancient mountain chain.

- 1) Make a small rock pile of varied sizes and cover them with soil, gravel and vegetation.
- 2) Wave a stiff piece of cardboard (pizza box, cereal box) briskly to create powerful winds, observe the changes to your mountains model.
- 3) Sprinkle water over the model and observe your mountains.
- 4) Pour a constant stream of water on one area at the highest point. Look for weathering and erosion. Write/draw observations below. What changes did you notice? Did the water erode soil to expose rock? Did waterfalls or plunge pools form? Repeat this experiment by building different models and comparing results.

How are new high elevation forests created?

Mosses and lichens are the pioneers of the mountain forest, which means they are the first things to grow on exposed rock after weathering. As the underlying rock weathers and cracks, soil gradually fills the small crevices and plants take hold. This process is called succession.

Go outside and look for places where you find lichen and moss or other vegetation on rocks. Write or draw what you notice? What do you think that same rock will look like in 5 years? 50 years?