

NAME: \_\_\_\_\_ Section: \_\_\_\_\_

Subject(s) of video(s): mountain slope environment; boulder sediment movement & modification

Purpose(s) of video(s): observing, describing, evaluating, predicting

Video: <https://www.youtube.com/watch?v=k-7tY68Az-c#t=92>

This adventurer is on a motorbike trip through the Himalayan Mountains when he meets a road crew building a section of highway. Carefully observe the boulders cascading down the steep slope to the river below, and address the following questions.

Observe the rock fragments around the bulldozer. These were created by blasting explosives into the rock of slope surface.

- Bulldozers push the largest fragments onto the slope. Observe and describe the shapes and sizes of these fragments.
- Describe any change(s) to the size and shape of the largest fragments as they move down the slope.
- Describe the motion of larger fragments – slide, roll, bounce, tumble etc.
- Notice that the bulldozer sets into motion one really massive boulder. Does this boulder affect any other material as this boulder moves down the slope? If so, describe.
- Notice the river at the base of this slope. The water is relatively shallow, as you can see rocks in the river. Where are all the places these river rocks could have come from?
- This slope may be on the order of 100 yards in length. Evaluate any difference(s) in the size, shapes, and deposits of sediment that motion down a *longer slope* (e.g., 1 mile) might cause.
- Suppose there were no river at the bottom of the slope. You're doing a geologic survey of the debris at the bottom (no river). Write a short description of the what you might find from a deposit 100 years old. 1,000 years old. 1,000,000 years old. Why would "time" make any difference at all?