

Name \_\_\_\_\_ Date \_\_\_\_\_ Period \_\_\_\_\_

## GEO SEQUENCING ONLINE

Directions:

- Go to [www.napscience.com](http://www.napscience.com)
- click on "student assignments"
- click on "Geo-Sequencing"
- Use the site to answer the following questions

### Page 1 "A Dynamic Earth"

- 1) On the opening page there are eight pictures. Click on any one picture and fill in the following:

	Name of location	Type of structure	How did it form?
Location			

### Page 2: "The Story in the Rock"

- 2) What is the *principal of uniformitarianism*?

### Page 3: "The Principal of Superposition"

Examine the cliffs in the photograph. Try to visualize the processes responsible for forming them.

Click the photograph to see an animation showing how the layers may have formed.

- 3) Which layers were deposited first and are therefore the oldest?
  
- 4) Which layers were deposited last and are therefore the youngest?
  
- 5) What is the *Principal of Superposition*?

### Page 4: "The Principle of Original Horizontality"

Examine the photograph to see the tilted layers of limestone. Try to imagine the processes responsible for tilting sedimentary layers.

Click the photograph to see an animation.

- 6) What is the *principle of original horizontality*?
  
- 7) How might layers that were once horizontal come to be tilted like this?

### Page 5: "Folded Layers"

Click the image to see an animation showing how folds form.

- 8) What type of force was applied to these rocks to form folds?

## Page 6: "The Principle of Cross-Cutting Relationships"

9) Darken the igneous intrusion in the image below from page 6.



## Page 7: "Faulted Layers"

10) Click the image to see the animation of a thrust fault. Draw arrows on the photo below showing the direction each side of the fault moved.



## Page 8: An Unconformity

11) Do the activity on this page. When finished, call me over to check your work.

## Page 9: Analyzing Sequences

Skip this page

## Page 10: Formation of an Unconformity

12) Watch the animation. How can an unconformity form?