

1. Only about 25% of the annual precipitation actually ends up in the river. Where does the other 85% go?
2. Describe how the following factors influence the characteristics of a stream.
 - a) Velocity
 - b) Channel Shape
 - c) Channel Roughness
3. What is discharge?
4. Describe the three erosional processes that take place in rivers.
 - a) hydraulic action
 - b) abrasion
 - c) dissolution
5. How are larger particles transported in a streambed?
6. What is saltation?
7. What are point bars and cut banks?
8. Why do people live in floodplains?
9. What is a levee?
10. What's the problem with Red Eye Crossing? How are we dealing with it?

1. How do valleys usually form?
2. What is the ultimate base level?
3. How did William Morris Davis classify streams? What were the stages? Describe each below.

Youthful:

Mature:

Old Age:

4. Describe a dendritic stream pattern. Why does it look the way it does?
5. Describe a Trellis drainage pattern. How do the rocks control this drainage pattern?
6. What is rejuvenation? What does it produce?
7. Describe how a incised meander forms?
8. Why do deltas form?
9. What cities depend on the Mississippi River the most?
10. How does the Atchafalaya River threaten these cities? How did the Army Corps of Engineers keep the threat to a minimum?

Earth Revealed #21: Ground Water

Name _____

1. How does groundwater originate? Name two (2) sources.
2. What is permeability?
3. What is porosity?
4. What is aquifer?
5. What is aquiclude?
6. Why is groundwater always slightly acidic?
7. Define: Water Table
8. What is effluence?
9. How do artesian wells form?
10. How does the use of groundwater cause an area to subside?
11. How are injection wells used to protect water quality in Orange County?

1. Where do deserts occur? How much of the Earth's surface do they cover?
2. Describe how deserts are generated in the sub tropics.
3. Describe how rainshadow works in creating a desert.
4. Describe how great distances over land can help create a desert.
5. How does cold air help create deserts? Give 2 examples.
6. What is an alluvial fan?
7. What is loess?
8. What are desert playas? How do they help make sand dunes?
9. What is a blowout?
10. What is desert pavement? How does it form?
11. How has desert varnish helped the study of archaeology?
12. What is desertification? How does it happen? Can it be prevented?

1. Define glacier:
2. What is firn?
3. What are the two types of glaciers:
 - a)
 - b)
4. What is a snowline? What boundary does it mark?
5. What are striations?
6. What is a moraine? Where do end moraines develop? How about Lateral Moraines? Medial Moraines?
7. How many ice age cycles have occurred in the last 1 million years?
8. Why has Hudson Bay risen 400 feet in the last 10,000 years?
9. What are Kettles?
10. What is the Greenland Ice Core Program doing?
11. What are greenhouse gases? Have these gases increased in our atmosphere in the 200 years? Why?

1. What is a water wave?
2. What is the Wave Base? What is its relationship with the wavelength?
3. Describe how and why waves break into surf.
4. What is wave refraction? Why does it occur?
5. How does wave refraction affect headlands and bays?
6. What are longshore currents? How do they make sand spits?
7. What are breakwaters?
8. What is so bad about sea walls?
9. How has Scripps built effective sea walls? What do they look like?
10. What are the eustatic changes? Is the sea level going up or down?

The Loma Prieta Earthquake

1. Which major cities were closest to the epicenter of the earthquake?
2. When are aftershocks the most prominent and dangerous? How long do they tend to go on?
3. How deep was the focus of the Loma Prieta earthquake?
4. How long did the earthquake last?
5. How old is the San Andreas Fault? How long?
6. What was the estimated magnitude of the 1906 S.F. earthquake?
7. What is Liquifaction?
8. What important clue did the Loma Prieta provide to seismologists about earthquake prediction?
9. Why is the Hayward Fault even a larger threat to the bay area?
10. How many people died in the Loma Prieta Earthquake? How much damage occurred? How many were injured?

Earth Revealed #26: Living With The Earth II Name _____

1. How do oil reserves actually form?
2. How are vibroseis trucks utilized to find oil?
3. How big is the oil reservoir in Bakersfield, CA?
4. What is horizontal drilling? Why is it useful compared to correctional drilling?
5. What is remote sensing? Why is it useful?
6. What does the EM spectrum have to do with remote sensing?
7. Does Pakistan have potential for oil reserves?
8. From our estimates, how much oil have we already used of our total supply?
9. What are some other potential sources of energy?
10. What are some sources of energy from the Earth's External Heat Engine?
11. What are some sources of energy from the Earth's Internal Heat Engine?
12. What is Geothermal Energy? What are some advantages? Disadvantages?