Rock Jeopardy Example Questions/Answers

Fun Rock Facts

- Q: What is the name of a famous ancient circular rock monument in England?
- A: Stonehenge.

Rock Types

- Q: How is igneous rock formed?
- A: Hardened lava.
- Q: Which type of rock is made from layers of sediment that are compacted and cemented together?
- A: Sedimentary rock.
- Q: How is metamorphic rock formed?
- A: Existing rock changed by heat and/or pressure.

The Rock Cycle

- Q: How is igneous rock transformed into metamorphic rock?
- A: The application of heat and pressure.
- Q: What happens when metamorphic rock melts and then cools?
- A: It becomes magma and then becomes igneous rock.
- Q: What is compaction?
- A: Layers of sediment become pressed together over time.

Rock Stresses

- Q: What is tensional stress?
- A: Tensional stress is the stress that pulls two rocks apart.
- Q: What is compressional stress?
- A: Stress that pushes two rocks together.
- Q: When does shear stress occur?
- A: This occurs between two rocks when one is being pushed in one direction and the other is being pulled in the opposite direction.

Rock Weathering

- Q: What is physical weathering?
- A: Physical actions, such as wind, or water freezing and cracking a rock.
- O: List the three main types of weathering:
- A: Physical, chemical and biological.
- Q: How does biological weathering occur?
- A: When living organisms break rocks.

Engineering Rocks!

- Q: Reasons engineers need to know about rocks?
- A: To build safe and strong bridges, roads and tunnels.
- Q: What kind of engineer is responsible for making sure a bridge is correctly designed and built?
- A: A civil and/or structural engineer.
- Q: Which kind of engineer focuses on learning about the Earth?
- A: A geological engineer.
- Q: Give an example of how an engineer's mistake involving rocks could harm people:
- A: If an engineer did not learn about the rocks supporting his bridge foundation, and design and build the bridge appropriately, the bridge could break or collapse.
- Q: What are things an engineer must take into consideration before building a dam.
- A: Rock sizes, location, and type; weathering and erosion; how much water will flow to and through the dam; size of the dam; cost; safety issues; electricity generated; effects on the fish and wildlife around the dam, and upstream and downstream; how much land will be flooded; how many people and/or businesses will have to move and/or be affected; how long it will take to build; what it will cost to maintain it...