

Earth Science

Part A (60 points): Answer each of the following questions in one or two paragraphs. Each answer is worth 20 points.

1. What are the three main kinds of rock in the Earth's crust? What role does each play in the rock cycle?
2. Describe the four processes that lift air and produce precipitation.
3. Explain and describe the nature, causes, and patterns of oceanic tides, with particular emphasis on the relationships of tides to lunar cycles.

Part B (40 points): Answer each of the following questions in one to four sentences. Each answer is worth 4 points.

1. Describe the three subatomic particles that make up an atom.
2. What are fossils? Why are they found only in sedimentary rock?
3. Define absolute magnitude.
4. Briefly describe the three types of volcanoes.
5. Explain the difference between an emergent coastline and a submergent coastline.
6. Briefly describe the three types of clouds.
7. What is an artesian well and how does it work?
8. How does hail form in a thunderstorm?
9. What is the Ring of Fire?
10. What is the relationship between neutron stars and black holes? What is a neutron star? Why is a black hole black?