

Earth Science Grade 4 Quiz

Teacher's Answer Key

1. What is the definition of a rock? (Something that is made of two or more minerals.)
2. What does it mean if there's no streak left on the streak plate? (The mineral is harder than the streak plate, which means it has a hardness of above 7.)
3. Give an example of a kind of rock that leaves a streak a different color than its surface color. (Pyrite is gold, but its streak is green-black.)
4. If a mineral scratches a penny but doesn't get scratched by a nail, can you approximate its hardness? (Over 5.5)
5. Give examples of the hardest and softest minerals on the Mohs' Scale. (Diamond = 10, Talc = 1)
6. Name three properties geologists look for when they try to categorize a mineral. (Color, hardness, fluorescence, magnetism, luster, how they break, if they react to acid, etc.)
7. If you break a sample of quartz and find that it has no clean surfaces of separation, what kind of cleavage does it show? (none)
8. What are two things we use coal for? (heating water and generating electricity)
9. What is the equation for finding density? ($\rho = m/V$)
10. How is fluorescence different from phosphorescence? (Minerals that are fluorescent glow when exposed to a UV light. Minerals that continue to emit light even after the UV light has been switched off are phosphorescent.)
11. Is lodestone the same as magnetite? (Lodestone is the magnetic version of magnetite.)
12. Name three characteristics of pumice. (light-colored, floats on water, and is porous.)
13. What is a crystal, and how is it different from a mineral and a rock? (Crystals are a structure of a regular pattern of atoms within a solid. A mineral is an inorganic substance. All minerals are crystalline. Rocks are composed of two or more minerals. Not all crystals are minerals.)

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Student Quiz Sheet

Name_____

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3. Give an example of a kind of rock that leaves a streak a different color than its surface color.
4. If a mineral scratches a penny but doesn't get scratched by a nail, can you approximate its hardness?
5. Give examples of the hardest and softest minerals on the Mohs' Scale of Hardness.
6. Name three properties geologists look for when they try to categorize a mineral.
7. If you break a sample of quartz and find that it has no clean surfaces of separation, what kind of cleavage does it show?
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9. What is the equation for finding density?
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