**Rocks & Minerals TCAP Review**

1. **A student has an unidentified mineral. The student wants to identify the mineral using information from the Mohs hardness scale, shown below. The student has a mineral identification kit that includes a piece of plastic, a copper coin, a glass plate and a steel file. Based on these hardness values, which result could identify the mineral as apatite?**

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**A** The mineral can be scratched by both a fingernail and a piece of plastic.

**B** The mineral can be scratched by a glass plate, but not by a copper coin.

**C** The mineral can be scratched by a steel file but not by a glass plate.

**D** The mineral can be scratched by both a copper coin and a glass plate.

1. **A student studying different rock types observed four unidentified rocks. The student wrote a description of each rock under its picture, as shown below. Which rock should the student classify as an igneous rock?**

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**A** 1

**B** 2

**C** 3

**D** 4

1. **Which processes must occur to change a metamorphic rock into an igneous rock?**

**A** melting and cooling

**B** weathering and erosion

**C** heat and pressure

**D** sedimentation and cementation

1. **Which best describes one way igneous rocks form?**

**A** Sedimentary rocks erode.

**B** Sedimentary rocks are compacted.

**C** Metamorphic rocks are melted, then cooled.

**D** Metamorphic rocks are deposited and cemented.

1. **Students were observing a green, odorless mineral, with no visible crystals The mineral was very soft, with a slick feel. They compared its characteristics to the table below. Which of these were the students most likely observing?**

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**A** Talc

**B** Sulfur

**C** Halite

**D** Quartz

1. **Small rock particles roll downhill into rivers and oceans and eventually become cemented together. This cemented material forms**

**A** igneous rock.

**B** metamorphic rock.

**C** molten rock.

**D** sedimentary rock.

1. **A student has an unidentified mineral sample. The mineral is gray and leaves a white streak. The student could scratch the mineral with a copper coin that has a hardness of 3.5, but not with a fingernail that has a hardness of 2.5. Based on the information in the table, which mineral does the student have?**

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**A** Graphite

**B** Talc

**C** Orthoclase

**D** Calcite

1. **What type of rock is most likely formed by process 1?**

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**A** sedimentary

**B** igneous

**C** metamorphic

**D** magma

1. **Which processes can change a metamorphic rock into an igneous rock?**

**A** weathering and erosion

**B** melting and cooling

**C** deposition and cementation

**D** heat and pressure

1. **Some processes in the rock cycle are listed below. Which type of rock is most likely to form by Process Z?**

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**A** lava

**B** metamorphic

**C** igneous

**D** sedimentary