

EVERYTHING MCAS EVER ASKED ABOUT MINERALS MADE PUBLIC


2011 Spring Release, Science and Technology/Engineering - Grade 5

 **Question 17: Multiple-Choice**

Reporting Category: Earth and Space Science

Standard: 1 - Give a simple explanation of what a mineral is and some examples, e.g., quartz, mica.

Which of the following **best** describes a mineral?

- A. the main nutrient in all foods
- B. a type of grain found in cereals
-  C. a natural substance that makes up rocks
- D. the decomposed plant matter found in soil

State Average = 81%

2010 Spring Release, Science and Technology/Engineering - Grade 5


 **Question 12: Multiple-Choice**

Reporting Category: Earth and Space Science

Standard: 2 - Identify the physical properties of minerals (hardness, color, luster, cleavage, and streak), and explain how minerals can be tested for these different physical properties.

Owen tested a physical property of a mineral. He rubbed a mineral sample on a piece of white tile. The mineral left a red mark on the tile.

Which of the following physical properties of the mineral was Owen **most likely** testing?

- A. cleavage
- B. hardness
- C. luster
-  D. streak


State Average = 66%

**2009 Spring Release, Science and Technology/Engineering - Grade 5
Question 3: Multiple-Choice**

Reporting Category: Earth and Space Science

Standard: 2 - Identify the physical properties of minerals (hardness, color, luster, cleavage, and streak), and explain how minerals can be tested for these different physical properties.

A student sorted mineral samples into two groups: dull and shiny. Which of the following properties did the student use to sort the mineral samples into groups?

- A. cleavage
- B. color
-  C. luster
- D. streak

State Average = 62%

**2008 Spring Release, Science and Technology/Engineering - Grade 5
Question 19: Open-Response**

Reporting Category: Earth and Space Science

Standard: 2 - Identify the physical properties of minerals (hardness, color, luster, cleavage, and streak), and explain how minerals can be tested for these different physical properties.

Elena found a piece of a mineral while on a hike. She wants to identify the mineral she found.

- a. Identify **two** physical properties of minerals.
 - a. Describe how Elena can test the mineral she found for **each** of the physical properties that you identified in part (a).

[View Student Work](#)

2007 Spring Release, Science and Technology/Engineering - Grade 5
Question 5: Multiple-Choice

Reporting Category: Earth and Space Science

Standard: 2 - Identify the physical properties of minerals (hardness, color, luster, cleavage, and streak), and explain how minerals can be tested for these different physical properties.

The Mohs scale for minerals is shown below.

softest										→ hardest									
1	2	3	4	5	6	7	8	9	10										
talc	gypsum	calcite	fluorite	apatite	feldspar	quartz	topaz	corundum	diamond										

An unknown mineral can be scratched by topaz, but not by feldspar. According to the Mohs scale, which of the following **best** describes the hardness of the unknown mineral?

- A. less than 5
- B. more than 8

- ✓ C. less than 8, but more than 6
- D. more than 4, but less than 6

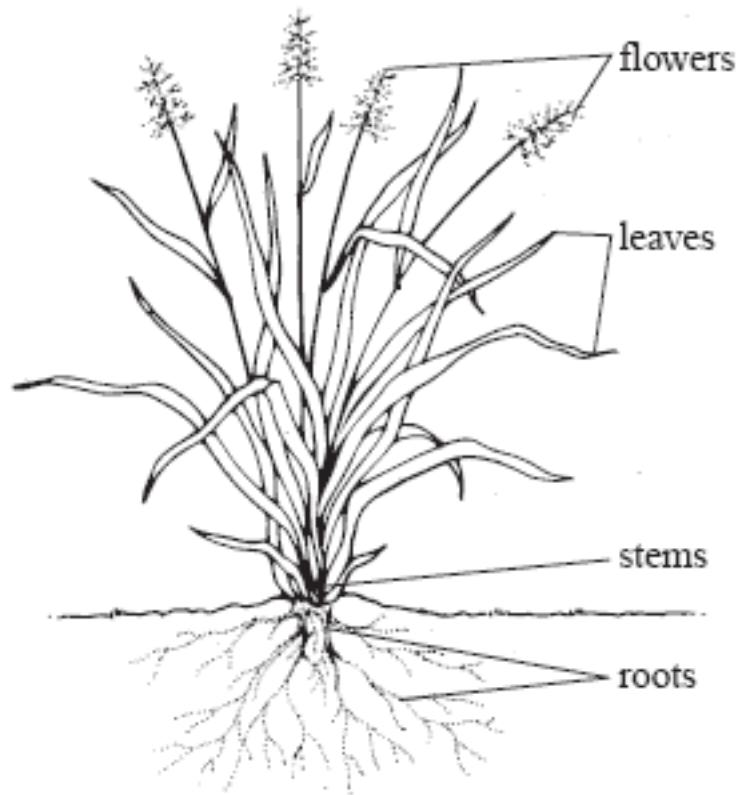
State Average = 68%

**2006 Spring Release, Science and Technology/Engineering - Grade 5
Question 5: Multiple-Choice**

Reporting Category: Life Science

Standard: 2 - Identify the structures in plants (leaves, roots, flowers, stem, bark, wood) that are responsible for food production, support, water transport, reproduction, growth, and protection.

A common grass is pictured below.



Which labeled parts of the grass absorb **most** of the minerals needed by this plant?

- A. flowers
- B. leaves
- C. stems
- ✓ D. roots

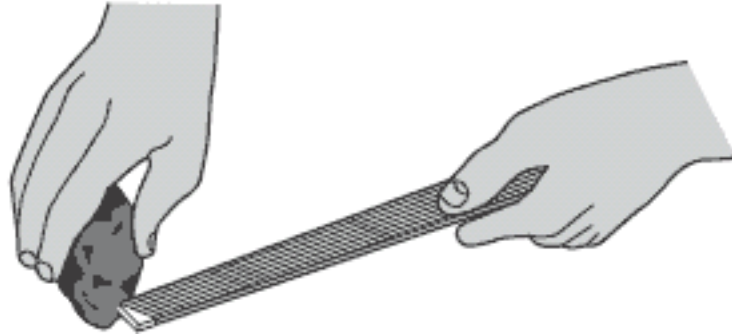
State Average = 88%

**2006 Spring Release, Science and Technology/Engineering - Grade 5
Question 17: Multiple-Choice**

Reporting Category: Earth and Space Science

Standard: 2 - Identify the physical properties of minerals (hardness, color, luster, cleavage, and streak), and explain how minerals can be tested for these different physical properties.

The picture below shows a mineral sample being tested with a metal file.



Which property of a mineral is **most likely** tested in this way?

- A. color
- ✓ B. hardness
- C. luster
- D. streak

State Average = 57%