

We will be working in this guide every day at the beginning of our science block in to get prepared for the Milestones Science Test in April. You may write on this but only work on questions for that day. Make notes in the area titled “Notes” and be ready to discuss your answers.

# Milestones Questions

Engage with Dissection of  
Questions

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## **DAY 1:**

**Q1. A student is observing swamp habitats in Georgia. The wet soil is often flooded and has few nutrients. What feature would MOST help a plant to survive in a swamp habitat?**

- A. leaves that can trap insects for food
- B. a thin stem that can bend in the wind
- C. waxy stems and leaves to hold in extra water
- D. a long central root to reach water deep underground

**NOTES:**

**Q2. A pine tree has needle-like leaves that help it survive cold winters and save water during warm summers.**

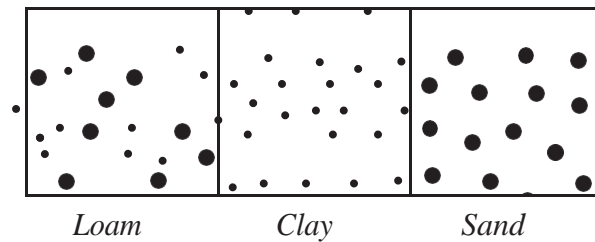
**In which two habitats are pine trees usually found in Georgia?**

- A. marshes and swamps
- B. Piedmont and the ocean
- C. coastal plains and marshes
- D. Piedmont and the mountains

**NOTES:**

## **DAY 2**

A student's drawing shows three different types of soil.



**Q3. Which statement BEST describes a difference between the types of soil?**

- A. Particles in clay are smaller than particles in loam and sand
- B. Particles in loam are lighter in color, and particles in clay are darker in color
- C. Particles in loam are the same size, but particles in sand are different sizes
- D. Particles in sand have a smooth texture, and particles in clay have a rough texture

**NOTES:**

1. Why do scientists use models to learn how fossils are formed?

- A. Plants turn into fossils as soon as they die.
- B. Animal fossils are valuable and hard to find.
- C. Fossils are so small that they are hard to see.
- D. Fossils are formed slowly over a long period of time.

**NOTES:**

### **DAY 3**

**Q4.** A student is learning about the characteristics of rocks and minerals. His teacher gives him a mineral sample to test.

Mohs Scale	Mineral
1	Talc
2	Gypsum
3	Calcite
4	Fluorite
5	Apatite
6	Feldspar
7	Quartz
8	Topaz
9	Corundum
10	Diamond

He makes the following notes about the mineral sample:

- It can scratch calcite and gypsum.
- It will not scratch topaz.
- It is softer than feldspar.
- It is harder than talc and fluorite.

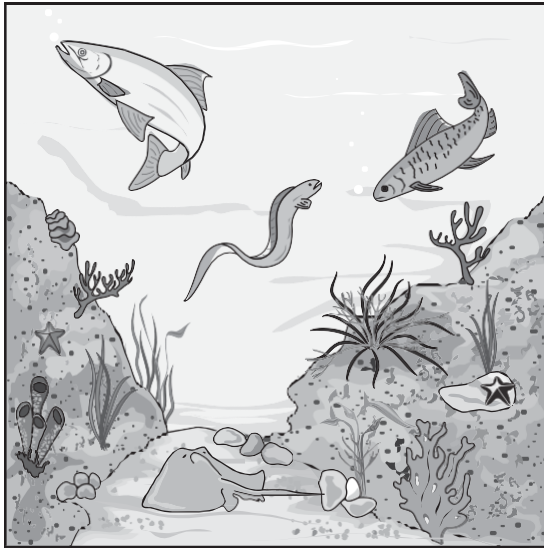
Which mineral from the table is the **BEST** match for the hardness of the mineral sample the student has?

- A. apatite
- B. corundum
- C. diamond
- D. quartz

**NOTES:**

## **DAY 4**

**Q5. A student made a poster to show the habitat he learned about in class.**



**Which habitat is shown in the student's poster?**

- A. ocean**
- B. marsh**
- C. Piedmont**
- D. Coastal Plain**

**NOTES:**

## **DAY 5:**

<b>Mohs' Scale</b>	<b>Mineral</b>
<b>1</b>	<b>Talc</b>
<b>2</b>	<b>Gypsum</b>
<b>3</b>	<b>Calcite</b>
<b>4</b>	<b>Fluorite</b>
<b>5</b>	<b>Apatite</b>
<b>6</b>	<b>Feldspar</b>
<b>7</b>	<b>Quartz</b>
<b>8</b>	<b>Topaz</b>
<b>9</b>	<b>Corundum</b>
<b>10</b>	<b>Diamond</b>

**Q6. A student is asked to identify a mineral with these characteristics:**

- **It can scratch fluorite and calcite.**
- **It will not scratch diamond.**
- **It is softer than topaz.**
- **It is harder than feldspar and apatite.**

**Which mineral fits the description?**

- A. talc
- B. quartz
- C. gypsum
- D. corundum

**NOTES:**

### **DAY 6:**

**Q7. A student has two cups of ice. She wraps one cup in newspaper. Then she places both cups in sunlight. She observes that the ice in the newspaper-wrapped cup takes longer to melt than the ice in the other cup.**

**Why did the ice in the newspaper-wrapped cup take longer to melt?**

- A.** The newspaper absorbed all the heat from the Sun.
- B.** The newspaper stopped heat flowing from the ice to the cup.
- C.** The newspaper stopped heat flowing from the Sun to the ice.
- D.** The newspaper slowed the flow of heat from the Sun to the ice.

**NOTES:**

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### **DAY 7:**

**Q8. A student saw sharp rocks on his way to a stream, and saw smooth rocks in the stream. Why were the rocks in the stream smoother?**

- A.** because wind wears down rocks
- B.** because moving water wears down rocks
- C.** because wind breaks rocks into smaller pieces
- D.** because moving water breaks rock into smaller pieces

**NOTES:**

## **DAY 8:**

4. A student places equal amounts of water in four containers made of different materials. She places the containers in the Sun and records the temperatures of the water after one hour.

In which type of container will the water have the highest temperature?

- A. copper
- B. glass
- C. plastic
- D. wood

**NOTES:**

8. Which of these would be LEAST helpful when trying to identify a mineral?

- A. color
- B. hardness
- C. mass
- D. streak

**NOTES:**

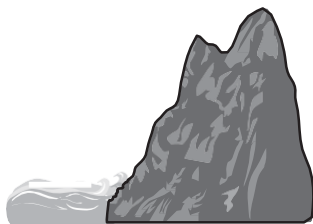


## **DAY 9:**

2. A student is experimenting with objects in his house to find those that are attracted to a magnet. It was found that the magnet was attracted to the door of a refrigerator because
- A. The door is made of a material that contains iron or steel.
  - B. The door is made of a material that contains aluminum.
  - C. The door is covered with something sticky.
  - D. The door is covered with paint containing copper.

**NOTES:**

3. A scientist observed the following changes in these seaside cliffs over a period of twenty years.



*20 years ago*



*10 years ago*



*Today*

**How can the scientist BEST explain the changes?**

- A. erosion by wind
- B. erosion by waves
- C. increase in sea level
- D. increase in sea temperature

**NOTES:**

## **DAY 10:**

**5. Which pair of features would MOST help an animal to live in the ocean?**

- A. thick skin and lungs
- B. sharp teeth and claws
- C. fins and long, slender body
- D. long legs and sharp, clawed feet

**NOTES:**

**6. The thermometers in the picture show the temperature of the water in each cup**



**BEAKER 1**



**BEAKER 2**



**BEAKER 3**

**Which of these shows the temperatures in order from cold to hot?**

- A. 1, 2, 3
- B. 3, 2, 1
- C. 1, 3, 2
- D. 2, 3, 1

**NOTES:**

## **DAY 11:**

- 7. Harmful chemicals from a farm wash into a nearby river when it rains. The river flows through a forested area.**

**If chemicals from the farm keep washing into the river, what will MOST LIKELY happen to the forested area over time?**

- A.** The forested area will support fewer animals.
- B.** The forested area will grow larger plants.
- C.** The forested area will clean the water naturally.
- D.** The forested area will support more trees.

**NOTES:**

- 9. Ben reads in a newspaper that scientists found a crocodile fossil that is much bigger than crocodiles living today.**

**Based on this information, which statement is MOST LIKELY true?**

- A.** Crocodiles lived longer in the past.
- B.** Small crocodiles cannot become fossil.
- C.** Crocodiles were once larger than they are today.
- D.** Crocodile bones get bigger when they turn into fossils.

**NOTES:**

## **DAY 12**

**10. Which characteristic is MOST needed for a tree to survive in dry areas?**

- A. tall trunk
- B. long roots
- C. wide leaves
- D. many branches

**NOTES:**