

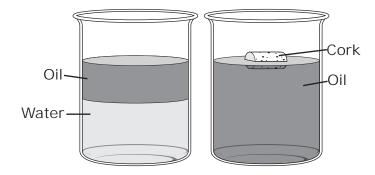
## SCIENCE Grade 5

## **2011 Released Test Questions**

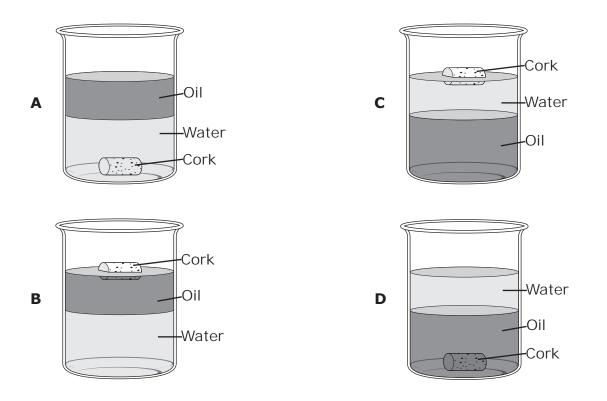
These released questions represent selected TEKS student expectations for each reporting category. These questions are samples only and do not represent all the student expectations for assessment.

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**1** The diagram below shows one container with oil and water and another container with oil and a cork.



Which diagram shows what would most likely happen if oil, water, and a cork were all placed in one container?



2 The table below shows the volume of four water samples tested in a laboratory.

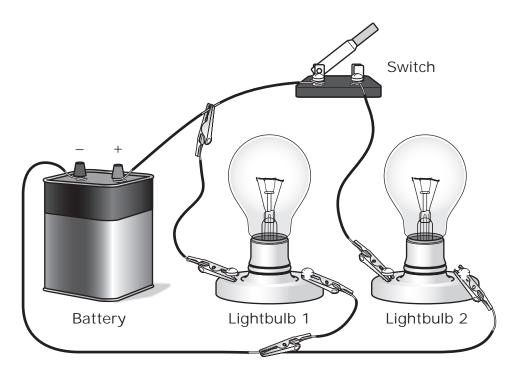
Water Sample	Volume (mL)
W	50
Х	100
Y	150
Z	200

If Sample W boils at a temperature of 100°C, at what temperature would Sample Z be expected to boil?

- **A** 25°C
- **B** 50°C
- **C** 100°C
- **D** 200°C

- 3 A small bowl contains a mixture of toothpicks and glass marbles. The easiest way to separate the mixture without touching it would be to -
  - **A** add glue to the mixture
  - **B** place a magnet in the bowl
  - **C** pour the mixture into a paper cone
  - **D** add water to the bowl

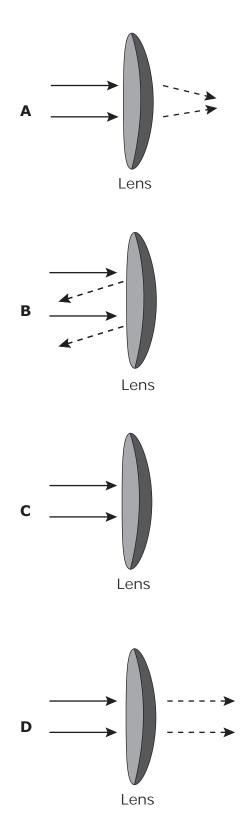
**4** A student builds a circuit made up of a battery, two lightbulbs, and a switch, as shown below.



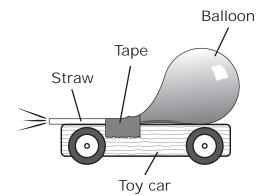
What will the student most likely observe in this circuit?

- **A** Lightbulb 1 and Lightbulb 2 will both be on.
- **B** Lightbulb 1 will be off, but Lightbulb 2 will be on.
- **C** Lightbulb 1 and Lightbulb 2 will both be off.
- **D** Lightbulb 1 will be on, but Lightbulb 2 will be off.

**5** The arrows in the diagrams below represent light. Which diagram best shows how a glass lens refracts light?



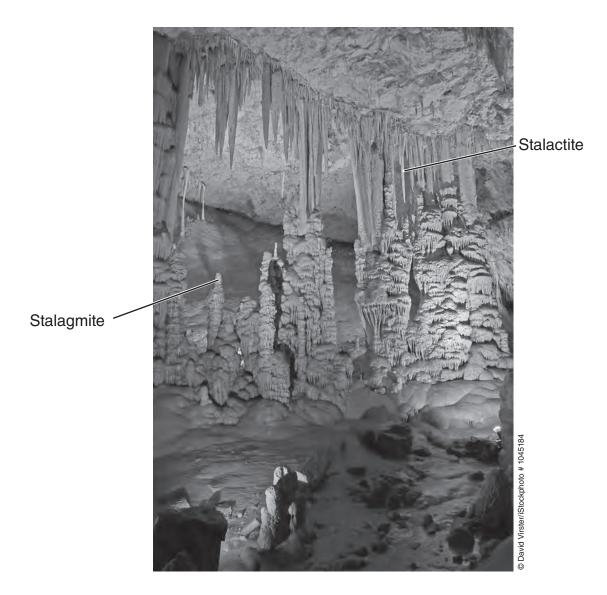
**6** Some students attach a balloon to a straw and then tape the straw to the top of a toy car. The students inflate the balloon and release the car. The car travels 40 centimeters across the floor.



What should the students do to determine whether the force of the air from a balloon is enough to push the car 40 centimeters across the same floor in repeated trials?

- A Test the car several times using an identical balloon filled with different amounts of air
- **B** Test the car several times using different-sized balloons filled with the same amount of air
- **C** Test the car several times using an identical balloon filled with the same amount of air
- **D** Test the car several times using different-sized balloons filled with different amounts of air

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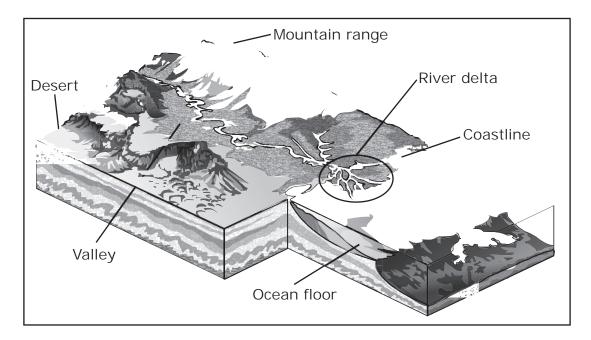


The finger-like formations in the cavern shown above are called stalactites and stalagmites. Which process most likely formed these stalactites and stalagmites?

- **A** Slow deposition of minerals
- **B** Fast erosion of soil
- C Fast rising of water
- **D** Slow cooling of air

- **8** A student observed the apparent shape of the moon every night for a period of 60 days. On Day 10 the student observed a full moon. On which other day did the student most likely observe a full moon?
  - **A** Day 20
  - **B** Day 30
  - **C** Day 40
  - **D** Day 50

**9** A river delta is an area where sediments are deposited.



The sediments in the river delta shown above most likely come from the -

- A mountain range
- **B** desert
- C ocean floor
- ${\boldsymbol{\mathsf{D}}}$  coastline

**10** The picture below shows a frog in a pond containing duckweed.



Duckweed

## Facts About Duckweed

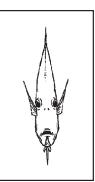
- Duckweed is a small plant that grows in water.
- Many waterbirds depend on duckweed for food.
- Duckweed can reproduce rapidly in water that is rich in the nutrients used in agriculture.

Which of these human activities would most likely cause an overgrowth of duckweed in a pond environment?

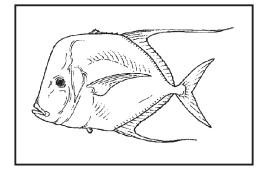
- **A** Gradually introducing geese into the pond
- **B** Fishing in the pond as recreation
- **C** Planting trees in nearby forests
- **D** Heavily fertilizing nearby farm fields

**11** The pictures show two views of a certain fish.

Head-on View



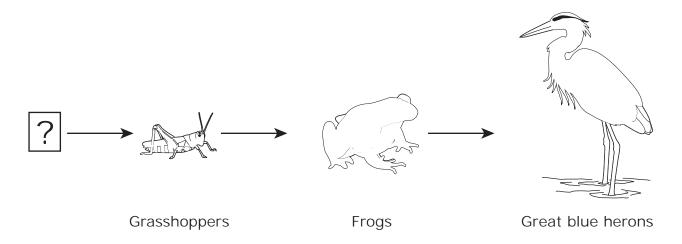




How does the appearance of this fish most likely help it survive?

- **A** Prey have little chance of seeing this fish as it approaches head-on.
- **B** The head-on view of this fish attracts predators.
- **C** The narrow body allows this fish to live in deeper water.
- **D** Predators have a hard time seeing the side view of this fish.

**12** A type of organism is missing from the food chain shown below.



Which statement about the type of organism that correctly completes this food chain is  $\ensuremath{\text{NOT}}$  true?

- **A** It produces its own food.
- **B** It is unable to move from one place to another.
- **C** It gets its energy from the sun.
- **D** It breaks down nutrients from decaying organisms.

Item Number	Reporting Category	Readiness or Supporting	Content Student Expectation	Process Student Expectation	Correct Answer
1	1	Readiness	5.5(A)	5.2(D)	В
2	1	Supporting	5.5(B)		С
3	1	Supporting	5.5(C)		D
4	2	Readiness	5.6(B)	5.2(D)	D
5	2	Readiness	5.6(C)		А
6	2	Supporting	5.6(D)	5.2(E)	С
7	3	Readiness	5.7(A)		А
8	3	Supporting	4.8(C)	5.2(C)	С
9	3	Readiness	5.7(B)		А
10	4	Supporting	5.9(C)	5.2(D)	D
11	4	Readiness	5.9(A)		А
12	4	Readiness	5.9(B)	5.3(C)	D

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