

Maryland School Assessment

**Science**

2008 Public Release

Grade 5

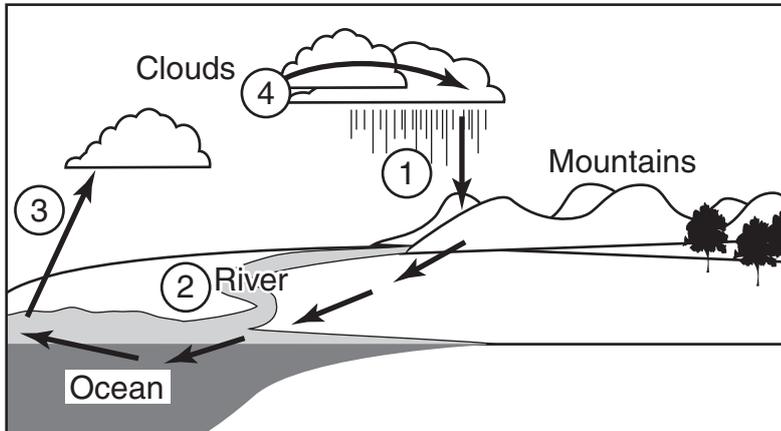
# Part 4



## Directions

Use the information below to answer Numbers 35 through 37.

The diagram below shows water moving through the environment.



**35** Which of these statements best describes the purpose of the arrows in the diagram?

- A The arrows show how clouds form.
- B The arrows show how erosion occurs.
- C The arrows show the processes of the water cycle.
- D The arrows show the movement of water to the ocean.

**36** Which number in the diagram represents condensation?

- A 1
- B 2
- C 3
- D 4

**37** Which of these statements describes a change to the surface of Earth that is caused by water moving through the environment?

- A Water transports soil.
- B Dew forms on grass.
- C Ocean tides follow a pattern.
- D Tropical storms remain over the ocean.



**38** The snowshoe hare was once common in Maryland. In 1986, researchers in the state noted that the snowshoe hare was no longer found in Maryland.

Which statement best explains why the snowshoe hare is no longer found in Maryland?

- A** Water quality has improved.
- B** There are too many trees.
- C** The temperature is too cold.
- D** Housing developments have replaced fields.

**39** The building of houses in Maryland uses many different materials.

Which building material is made of a renewable natural resource?

- A** copper wire
- B** steel beams
- C** wood boards
- D** plastic siding

**Directions**

Use the information below to answer Numbers 40 through 42.

A student is investigating changes in the states of matter. The student fills a graduated cylinder with 50 milliliters of packed snow. The graduated cylinder has a mass of 50 grams when empty and 95 grams when filled with the snow.

- 40** The packed snow changes to liquid water when the snow is put in a warm room.

Which statement best describes this process?

- A** Cooling causes the snow to melt.
- B** Cooling causes the snow to freeze.
- C** Heating causes the snow to freeze.
- D** Heating causes the snow to melt.

- 41** During which process in the water cycle does snow fall to the ground?

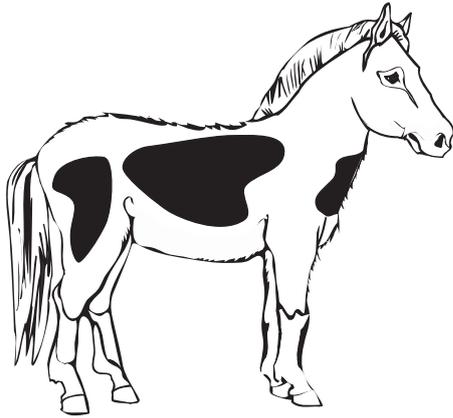
- A** classification
- B** condensation
- C** evaporation
- D** precipitation



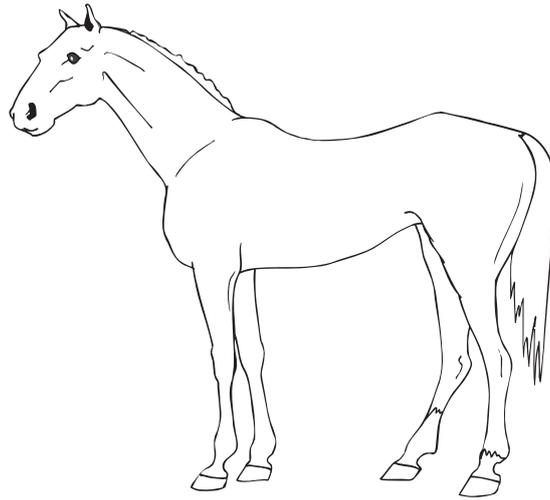
## Directions

Use the information and pictures below to answer Numbers 43 through 45.

Wild ponies have lived on Assateague Island for about 300 years. The ponies have become well adapted to the harsh environment, including extreme temperatures in summer and winter. The ponies mainly eat salty marsh grasses and grow thick fur in winter. Domestic horses are larger than the ponies. An Assateague pony drinks twice as much fresh water as a domestic horse does. Other organisms on the island include rodents, birds, small foxes, marsh grasses, mussels, and deer.



Assateague Pony



Domestic Horse

- 43** The ponies drink so much more fresh water than domestic horses in other habitats that the ponies appear fat.

What is the most likely reason the ponies drink so much fresh water?

- A** Their thin fur makes them lose water.
- B** They have many predators on the island.
- C** Their food contains a large amount of salt.
- D** They have small bodies that lose water quickly.

- 44** During the summer, flies and ticks bite the ponies. The cattle egret is a bird that sometimes eats the flies and ticks from the ponies.

This relationship between the pony and the egret helps

- A** only the pony
- B** the flies and ticks
- C** only the cattle egret
- D** the pony and the cattle egret

- 45** Why have the ponies developed a coat of thick fur?

- A** to stay warm
- B** to help them swim
- C** to prepare them to find mates
- D** to protect them from predators



## **Acknowledgements**

“Hazy Summer Days and Air Pollution” by Sarah Ives, National Geographic Kids News. July 27, 2004 ([http://news.nationalgeographic.com/kids/2004/07/Hazy summer.html](http://news.nationalgeographic.com/kids/2004/07/Hazy%20summer.html))

“Glaciers and People” by Spencer Christian and Antonia Felix. From WHAT MAKES THE GRAND CANYON GRAND? THE WORLD'S MOST AWE-INSPIRING NATURAL WONDERS by Spencer Christian and Antonia Felix. Copyright © 1998 by Spencer Christian and Antonia Felix. Reprinted with permission of John Wiley & Sons, Inc.