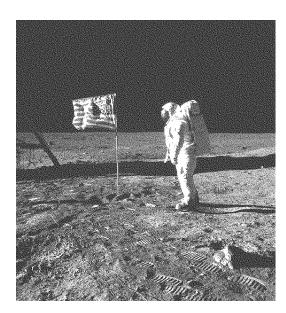
## **5th Grade Science Sample Questions**

Name:

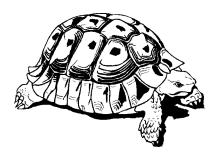
1) The picture below shows the landing of an American astronaut on the Moon.



The American flag shown on the Moon required a support rod at the upper edge to hold the flag out. What characteristic of the Moon's environment makes this necessary?

- A) The strong winds on the Moon might blow the flag too hard.
- B) The gravity on the Moon is greater than the Earth's, so the flag needs extra support.
- C) The Moon has no weather and no wind to blow the flag.
- D) The Moon's atmosphere is much thicker than the Earth's, so the flag needs extra support.
- 2) Insecticides and pesticides are helpful to farmers because they prevent crop damage. A disadvantage of insecticides and pesticides is that they—
  - A) can pollute nearby rivers and lakes.
  - B) change the salt levels in oceans.
  - C) increase erosion on farmland.
  - D) cause more severe weather conditions.

 Fossils of turtles, such as the one shown, prove that many species of turtles have not changed over millions of years.



The most likely reason that turtles have not changed is —

- A) their environments are very different now compared to millions of years ago.
- B) their predators eliminated all of the turtles with adaptations.
- C) their environments did not change and they were able to survive.
- D) they have easily adapted to new environments without changing.
- 4) In an experiment, a block of wood, a hard-boiled egg, and a cork were placed in a beaker of water. The egg fell straight to the bottom, the block floated just below the water's surface, and the cork floated mostly on top of the water's surface. Which one of the following had the greatest density?
  - A) Cork
  - B) Hard-boiled egg
  - C) Block of wood
  - D) Water
- 5) Imagine you are the lucky winner of a contest that sends you to the Moon. Describe what the journey is like and what things you observe about the Moon when you get there.

- 6) The kapok tree survives in the rainforest because it is about 200 feet tall. How does this adaptation help it to survive?
  - A) It gives the tree room to grow.
  - B) It allows the tree to get much needed sunlight.
  - C) It allows all types of fruit to grow on the tree.
  - D) It allows the tree to release oxygen.
- 7) In order to survive, an organism must
  - A) be the highest organism in the food pyramid.
  - B) have high intelligence.
  - C) sense and respond to changes in its environment.
  - D) be able to produce its own food.
- 8) A student is studying actions and reactions. She carries out an experiment to test how high a ball will bounce if she drops it from various heights. The chart below shows the results.

Height of Ball When Dropped (in cm)	Height Ball Bounces (in cm)
30	10
60	20
90	30
120	40
150	?

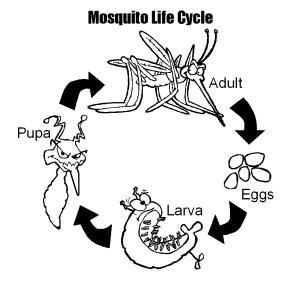
Using the data in the chart, what is the best prediction of how high the ball will bounce when it is dropped from a height of 150 cm?

- A) 100 cm
- C) 30 cm

- B) 50 cm
- D) 60 cm
- 9) Which is the correct order of soil particles from smallest to largest?
  - A)  $Clay \rightarrow Silt \rightarrow Sand \rightarrow Gravel$
  - B) Silt  $\rightarrow$  Sand  $\rightarrow$  Clay  $\rightarrow$  Gravel
  - C) Gravel  $\rightarrow$  Sand  $\rightarrow$  Silt  $\rightarrow$  Clay
  - D)  $Clay \rightarrow Sand \rightarrow Silt \rightarrow Gravel$

- Buoyancy is determined by an upward force exerted by a liquid or gas that opposes the density of an immersed object and the gravity acting upon it.
  - (a) Design an experiment that illustrates this principle of buoyancy by comparing the densities of two different objects.
  - (b) How do you believe this experiment might change when repeated at a higher elevation?

11) Which of the following processes must the mosquito undergo in order to complete its life cycle?



- A) Larva
- B) Hibernation
- C) Metamorphosis
- D) Pupa