

5th grade science sample test questions

Objective numbers correspond to the State Priority Academic Student Skills (PASS) standards and objectives. This number is also referenced with the local objective's verbal description on the pacing guide and on student benchmark reports.

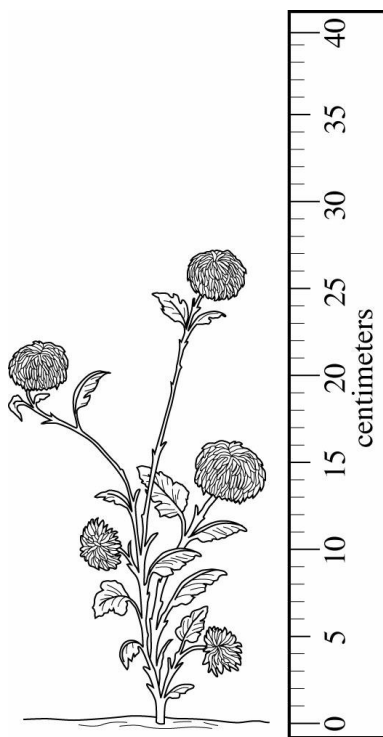
Process Objective: 1.1

Content Objective: 1.2

1. The mass of an ice cube is **best** measured in

- A liters.
- B grams.
- C meters.
- D degrees Celsius.

2.



Which metric measurement would be **closest** to the height of the plant?

- A 17 centimeters
- B 25 centimeters
- C 27 centimeters
- D 30 centimeters

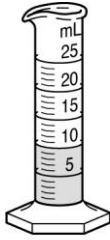
3. Which race is the same length as a 1000-meter race?

- A a 1000-kilometer race
- B a 100-kilometer race
- C a 10-kilometer race
- D a 1-kilometer race

Process Objective: 1.2

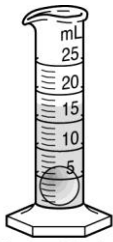
Content Objective: 1.2

4. Four different objects are placed in this graduated cylinder, one at a time, to measure the volume of water each object displaces.



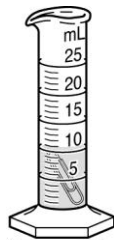
Which object displaces the most water?

A



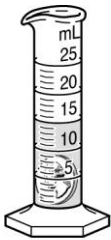
Glass Marble

C



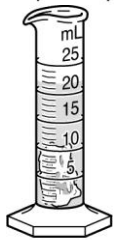
Paper Clip

B



Coin

D



Rock

Process Objective: 1.2

Content Objective: 3.3

5.

**Planet Diameters
(kilometers)**

Earth	Mars	Saturn	Venus	Jupiter
12,756	6794	120,660	12,104	142,800

Which of these planets is closest in size to Earth?

- A Venus
- B Jupiter
- C Mars
- D Saturn

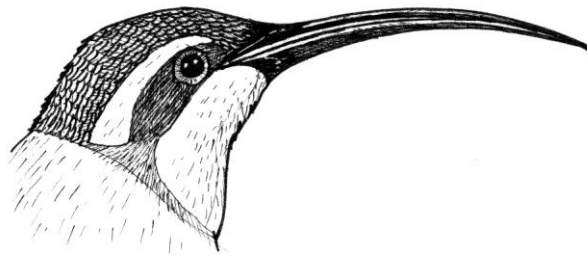
Process Objective: 1.2

Content Objective: 2.1

6.

Bird Characteristics

Type of Bird	Main Diet	Feeding Habits
house finch	seeds	cracks open seeds with beak and eats the insides
ruby-throated hummingbird	flower nectar	puts beak into flower petals and drinks the nectar
scissortail flycatcher	flying insects	captures insects with beak while flying and swallows
screech owl	mice	captures mice with feet and tears them with short, sharp, curved beak



This beak most likely belongs to a

- A house finch.
- B ruby-throated hummingbird.
- C scissortail flycatcher.
- D screech owl.

Process Objective: 2.1

Content Objective 3.2

7.

Identification Key

Step	Characteristics	Identification
1 a	clouds are low in the sky	go to 2
1 b	clouds are high in the sky	go to 3
2 a	clouds are gray	go to 4
2 b	clouds are white or gray and white	go to 5
3 a	clouds are feathery	cirrus
3 b	clouds are puffy with spaces in between like waves	cirrocumulus
4 a	clouds are light gray and cover the sky like a blanket	stratus
4 b	clouds are dark gray and hide the sun; it may be raining continuously	nimbostratus
5 a	clouds are puffy like cotton balls	cumulus
5 b	clouds are large, puffy, and tall like a tower; there may be a thunderstorm	cumulonimbus

Mrs. Stevens asked her class to identify the clouds they saw outside. The class observed that the clouds were low in the sky and were light gray. The students could not see any blue sky through the clouds. Which is the most likely identification of the clouds observed by the class?

- A** stratus
- B** nimbostratus
- C** cumulus
- D** cumulonimbus

Process Objective: 2.1

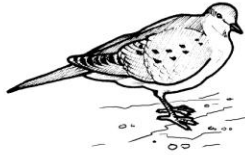
Content Objective: 2.1

8.

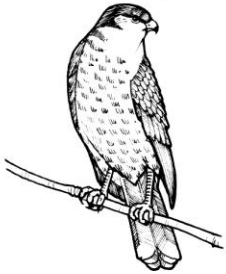
Birds that prey on other birds usually have short, curved beaks and strong feet with sharp talons.



blue jay



mourning dove



sharp-shinned hawk

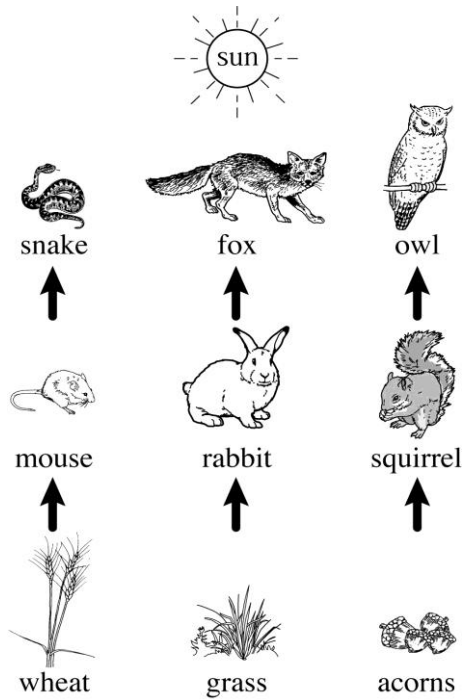


house sparrow

Which of these birds most likely preys on other birds?

- A house sparrow
- B blue jay
- C mourning dove
- D sharp-shinned hawk

9.



**Characteristics of Organisms
in Land Ecosystems**

producers	organisms that produce their own energy through photosynthesis
consumers	organisms that must consume other organisms for energy

Which set of organisms from the food chains above contains only consumers?

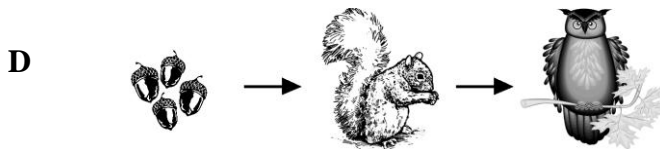
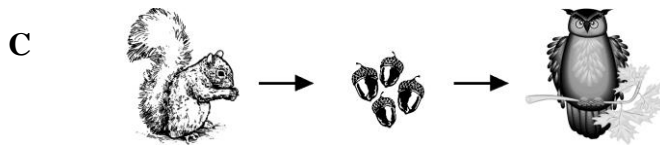
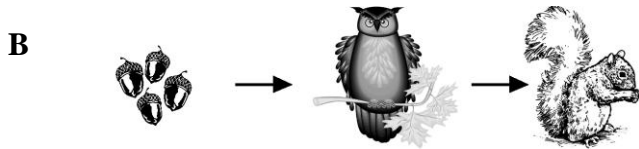
- A snake, rabbit, acorns
- B wheat, grasses, acorns
- C mouse, grasses, owl
- D snake, rabbit, squirrel

Process Objective: 2.2

Content Objective: 2.1

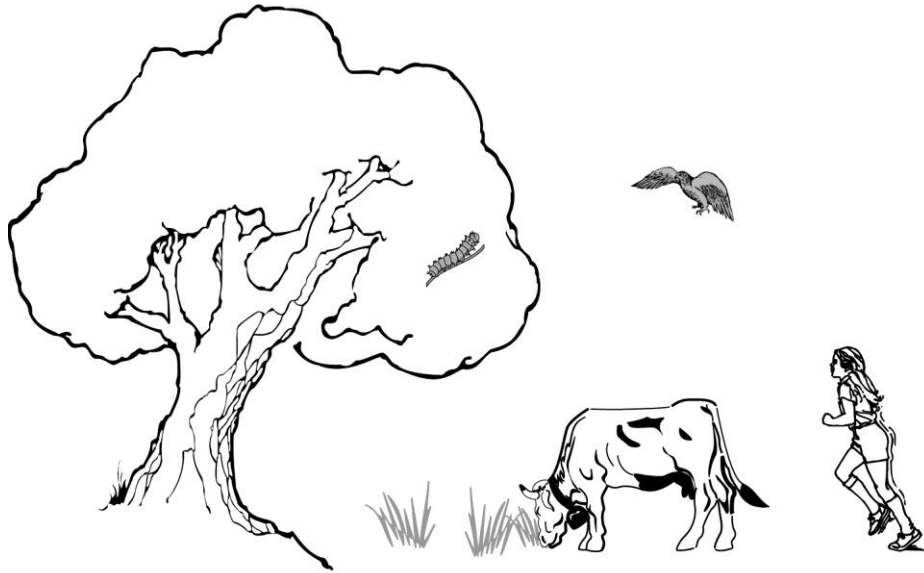
10.

In what order do the owl, acorn, and squirrel form a food chain?



11.

Food Chain



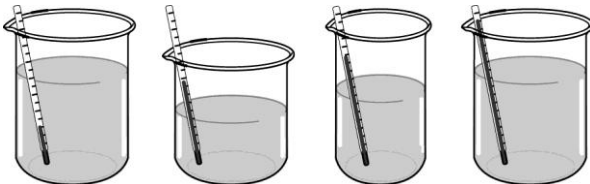
Which of these is a properly ordered food chain created from the ecosystem shown above?

- A grass → cow → human
- B caterpillar → tree → human
- C cow → grass → human
- D tree → bird → caterpillar

Process Objective: 2.2

Content Objective: 1.2

12.



These containers are arranged according to the

- A color of the liquid.
- B size of the container.
- C amount of the liquid.
- D temperature of the liquid.

Process Objective: 3.2

Content Objective: 1.3

13.

Jason and Myra conducted an experiment to show that heat moves from warmer objects to cooler objects. In what order did they complete the steps?

- 1. developed a conclusion based on their findings**
- 2. gathered materials needed**
- 3. followed their procedure**
- 4. recorded their observations**

A 2 3 1 4

B 2 3 4 1

C 3 2 4 1

D 3 2 1 4

Process Objective: 3.2

Content Objective: 2.2

14.

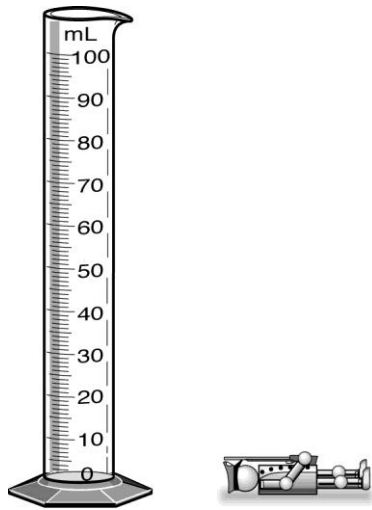
Kara did an experiment to find out the effect of temperature on the activity of yeast. Which step would come last in Kara's experiment?

- A** Put 5 grams of sugar in each bowl.
- B** Put 120 milliliters of water in each bowl.
- C** Add 1 gram of yeast to each bowl.
- D** Move one bowl to a warmer place.

Process Objective: 3.2

Content Objective: 1.2

15.



A student wants to know the volume of the toy soldier. Using the equipment shown, the student did the following steps. Which step should have been left out?

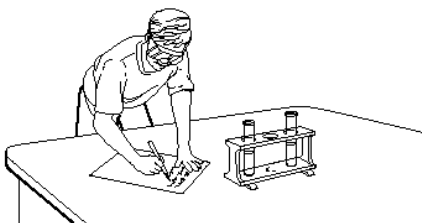
- A Fill the graduated cylinder with 50 mL of water.
- B Measure the width of the object.
- C Slowly place the soldier into the water.
- D Subtract the difference between the two water levels.

Process Objective: 3.4

16.

These fifth-grade students are doing a science experiment at their work station during class. Which student is not practicing good laboratory safety?

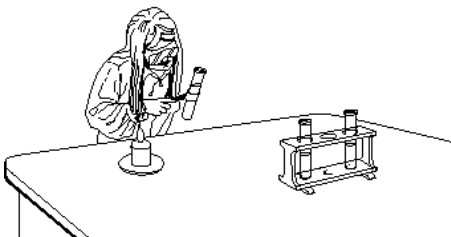
A



C



B



D



17.

In order to work safely in a science class, what is the last activity students should do after handling an animal?

- A put the animal back in the cage
- B wash their hands thoroughly
- C wipe off the table where they worked
- D give the animal food and clean water

18.

A student is making observations using his senses to determine what substance is in a clear, plastic cup. Which activity is most dangerous for him?

- A tasting the liquid in the cup
- B observing the liquid through the cup
- C feeling the cup to check for temperature changes
- D smelling the liquid by waving the odor to his nose with his hand

Process Objective: 4.2
Content Objective: 3.2

19.

**Temperature Readings at
Witney Elementary School**

	Low Temperature (°C)	High Temperature (°C)
Monday	19	28
Tuesday	20	27
Wednesday	20	28
Thursday	18	26
Friday	19	29

The fifth-grade class recorded the high and low temperatures in their schoolyard every day for one week. On which day of the week did the temperature change the least?

- A Monday
- B Tuesday
- C Wednesday
- D Thursday

20.

Times of Sunrise and Sunset

Date	Sunrise (A.M.)	Sunset (P.M.)
7th	7:08	6:15
8th	7:06	6:17
9th	7:04	6:19
10th	7:02	6:21

Based on the data in the table, when will the sun rise on the 12th day of the month?

- A 7:02 A.M.
- B 7:01 A.M.
- C 7:00 A.M.
- D 6:58 A.M.

Process Objective: 4.2

Content Objective: 3.3

21.

Planetary Information

Planet	Distance from Sun (millions of kilometers)
Earth	149.7
Jupiter	783.1
Mars	227.9
Mercury	57.9
Neptune	4497.2
Pluto	5913.5
Saturn	1427.0
Uranus	2871.1
Venus	108.2

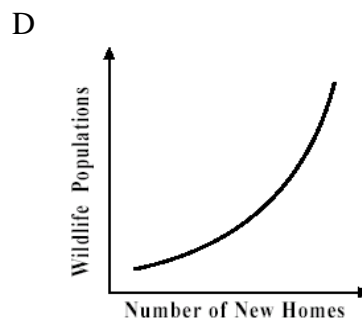
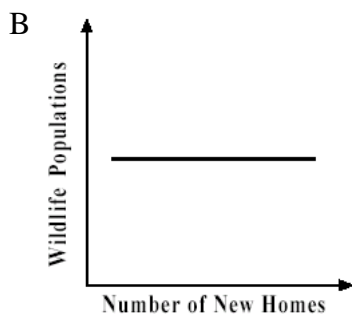
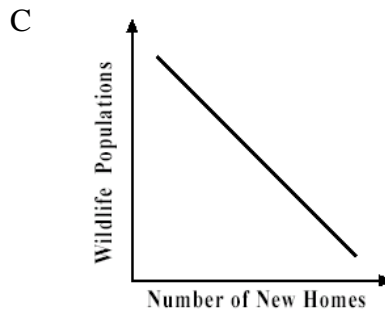
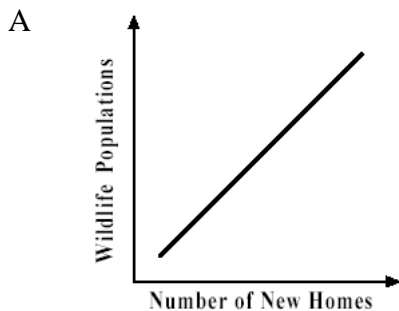
According to the information in the table, which planet revolves around the sun in the shortest period of time?

- A Pluto
- B Earth
- C Jupiter
- D Mercury

Process Objective: 4.2

Content Objective: 2.2

22. Many wildlife populations decrease in size when their habitats are changed as people build homes in undeveloped wildlife habitats. Which graph best shows this relationship?



Process Objective: 4.3

Content Objective 2.1

23. The table below shows how fish populations in three aquariums changed over a four-month period. No fish were added to or taken from any of the aquariums during the four months.

Fish Populations

Aquarium #	September 8		January 8	
	Males	Females	Males	Females
1	2	3	21	26
2	0	5	0	4
3	5	0	5	0

The fish population will be counted again in the three aquariums on May 8th. Which of the following is the most likely population of Aquarium 3 in May?

- A 0 to 5 male fish
- B 0 to 4 female fish
- C 6 to 20 male and female fish
- D 20 or more male and female fish

Process Objective: 4.3

Content Objective: 1.1

24.

Color and Streak of Five Minerals

Mineral	Color	Streak
anhydrite	colorless, white, gray, bluish, or violet	white
quartz	colorless, white, purple, or gray	white
graphite	black to silver	black gray to brownish gray
hematite	silver gray, black, red or brown	red or brown

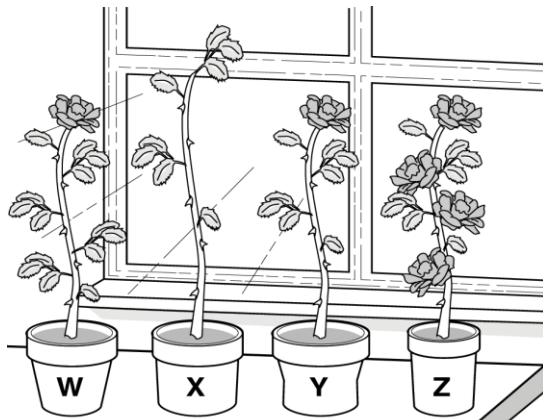
According to the table, which is the most likely streak color of the mineral halite, which can be colorless, white, blue, purple, pink, or yellow?

- A brown
- B black
- C white
- D red

Process Objective: 4.4

Content Objective: 2.2

25.



A gardener watered each of these pots with equal amounts of water. Only one pot was given fertilizer that increases the number of flowers on each plant. Which plant was probably given the fertilizer?

- A W
- B X
- C Y
- D Z

Process Objective: 4.4

Content Objective: 1.3

26.

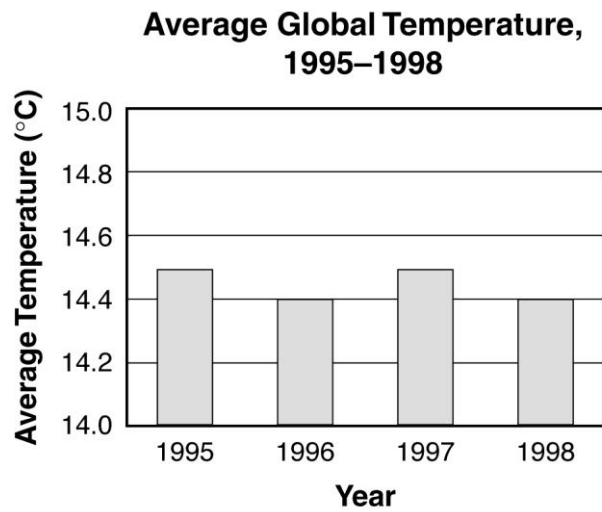
A class placed a metal spoon and a wooden spoon into a glass of hot water. They waited five minutes and touched the spoon handles. What most likely happened to the spoon handles?

- A The wooden spoon became hotter.
- B The metal spoon changed color.
- C The wooden spoon changed shape.
- D The metal spoon became hotter.

Process Objective: 4.4

Content Objective: 3.2

27.



Scientists gathered the data shown above that shows the average global temperatures over a four-year period. This graph shows that, from 1995 to 1998, global temperatures were

- A going up.
- B going up and down.
- C going down.
- D staying the same.

ANSWER KEY for 5th grade sample test

1. B
2. C
3. D
4. D
5. A
6. B
7. A
8. D
9. D
10. D
11. A
12. D
13. B
14. D
15. B
16. B
17. B
18. A
19. B
20. D
21. D
22. C
23. A
24. C
25. D
26. D
27. C