VIRGINIA STANDARDS OF LEARNING

Spring 2005 Released Test

GRADE 3 SCIENCE

CORE 1

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Science

DIRECTIONS

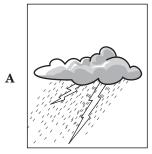
Read each question carefully and choose the best answer. Then mark the space in the answer booklet for the answer you have chosen.

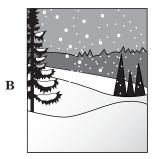
SAMPLE

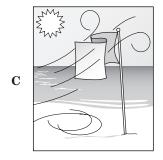
When the Earth is seen from outer space, it looks mainly blue. This is because most of the Earth is covered with —

- A ice
- **B** mountains
- c oceans
- **D** deserts

1 Which of the following weather conditions would make you put on a heavy, warm coat and gloves?

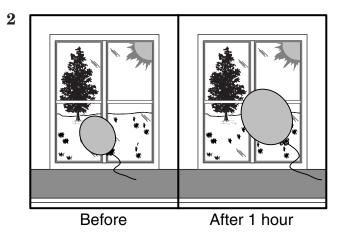










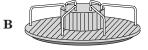


Bobby put his balloon near a window. The picture shows what happened to the balloon after it was near a window for about an hour. Which of these probably caused the balloon to become larger?

- **F** Heat from the sun
- G Glass in the window
- **H** The tree by the window
- J The string on the balloon

3 Which piece of playground equipment is made for circular motion?





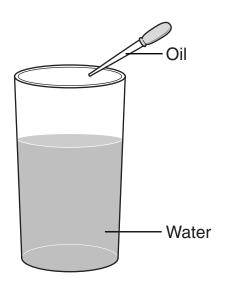




- 4 Which of these will look most like its parent when it hatches from an egg?
 - F A butterfly
 - G A frog
 - н A snake
 - J A moth

3





If a small amount of oil is dropped into the water, the —

- A oil and the water will mix
- **B** oil will rise to the top of the water
- c water will take up less space in the jar
- **D** water will rise to the top of the oil

6 Which of these is <u>not</u> a natural resource?

- **F** Plants
- G Insects
- н Cars
- J Soils

7 What can we do to reduce air pollution?

- **A** Take showers instead of baths
- **B** Drive cars less often
- c Pick up litter

8

D Recycle aluminum cans



Which animal in this picture is <u>below</u> the lily pad?

- **F** Beaver
- G Turtle
- H Insect
- J Fish



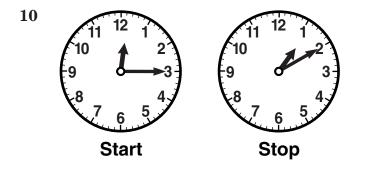
9

About how long is this snake in inches?

- A 1 inch
- **B** 3 inches
- c 5 inches
- **D** 12 inches

11 Which of these is a herbivore?

- A A cat that eats mice
- **B** A cow that eats grass
- **c** A frog that eats insects
- **D** An opossum that eats fruit and fish



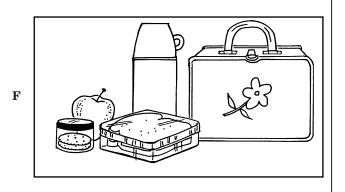
A bucket of ice was left outside to melt on a warm day. The picture shows the time the experiment was started and the time the ice finally melted. At what time did the ice melt?

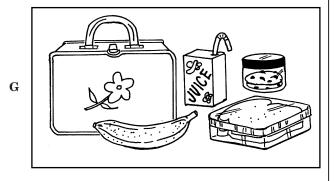
- **f** 1:02 p.m.
- G 1:10 P.M.
- **н** 12:15 р.м.
- **J** 2:10 p.m.

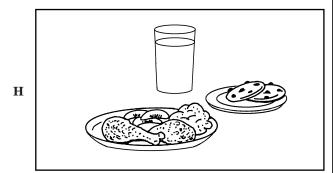
-5-

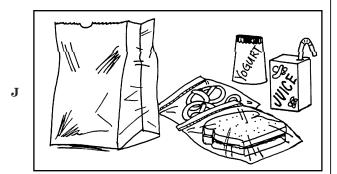


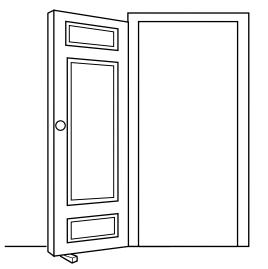
12 Which lunch produces the MOST trash?











Which of the following is being used to hold the door open?

A A wedge

13

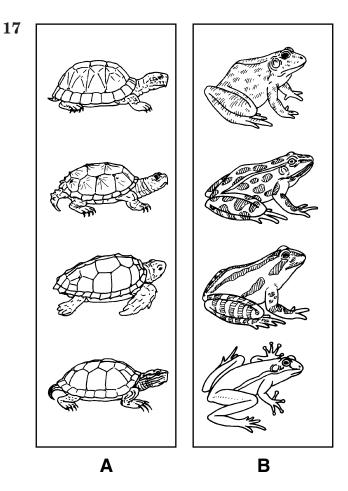
- **B** A screw
- c A lever
- **D** A pulley
- 14 Bobby has a pet lizard that eats insects. Which of these does <u>not</u> need to be in the lizard's cage?
 - f Air
 - G Plants
 - н Clean water
 - **J** Grasshoppers
- 15 A piece of metal is probably a magnet if it
 - A can pull some metals to it
 - B has a dull metal color
 - c becomes rusty in the rain
 - \boldsymbol{D} has the letter N on it





This is a picture of a dry riverbed. What part of the water cycle is needed for the river to run?

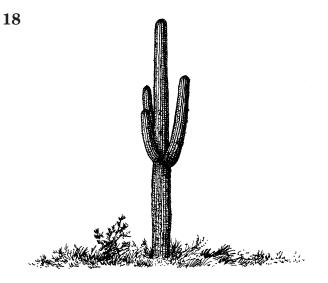
- **F** Evaporation
- G Condensation
- **H** Precipitation
- J Weathering



The animals in box A are DIFFERENT from the animals in box B because the animals in box A —

- A have webbed feet
- **B** have four legs
- c have a hard shell
- **D** do not have tails





This cactus has a thick skin that feels like wax. This type of skin is important because it —

- **F** helps to save water
- G keeps the plant warm
- **H** allows the plant to get food from the air
- J keeps the plant from falling over

- 20 When water evaporates, it changes into a
 - F solid
 - G mixture
 - H gas
 - J solution
- 21 Which of these objects is a type of screw?
 - A Flagpole
 - **B** Doorknob
 - c Roller skates
 - D Jar lid

19



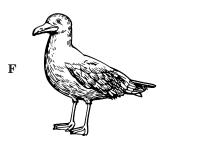
A shadow is caused by -

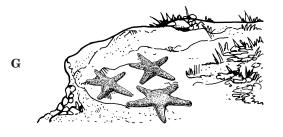
- A light being blocked by an object
- **B** a lack of light in the room
- c too much light in the room
- **D** an object reflecting light

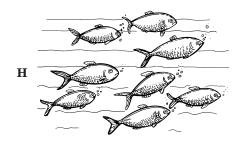
- 8 -

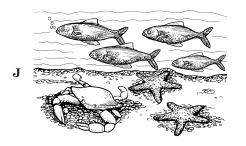


22 Which picture shows an ocean community?

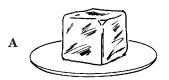








23 The pictures below show an ice cube left on a plate in a warm room. Which picture was taken last?









- 24 Smelts are fish that lay their eggs in the sand on beaches. When the eggs hatch, the babies know to go to the water. This is an example of —
 - \mathbf{F} instinct

9

- G hibernation
- H camouflage
- J learned behavior



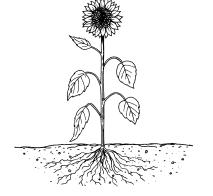
25 Why is it easier to grow plants in topsoil than in subsoil?

- A Topsoil has more clay.
- **B** Topsoil has more rocks.
- c Topsoil has more dust.
- **D** Topsoil has more humus.

26 Which of these would be <u>best</u> to use to report the temperature of a liquid?

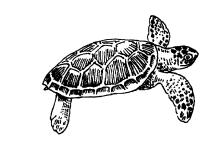
- **F** Degrees Celsius
- **G** Meters
- H Kilograms
- J Liters

27



The part of this plant that takes water from the soil is the —

- A stem
- B leaf
- c flower
- D root



A turtle uses its shell for —

F defense

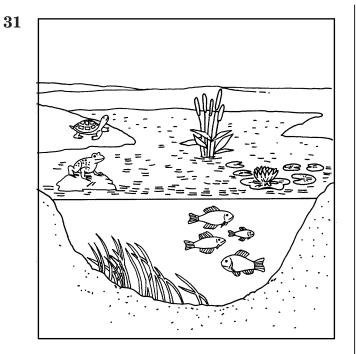
28

- G movement
- H rearing young
- J storing food
- 29 A car, a tree, a grain of sugar, and a drop of ink are alike because they are all made of
 - A metal
 - B sunlight
 - c smaller parts
 - **D** air and water
- 30 Even on the coldest winter days, there is some heat in the air. Almost all of the heat in the air comes from —
 - **F** forest fires
 - G volcanoes
 - H the sun

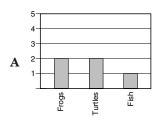
- 10 -

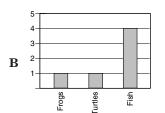
J the wind

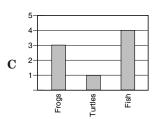


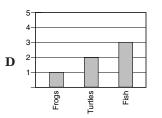


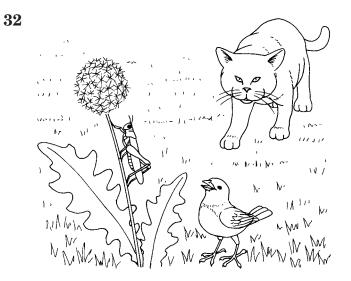
Which of these correctly tells about what is in the pond?











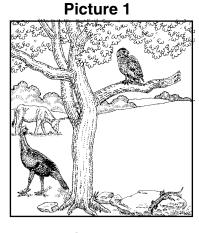
Which living thing produces its own food?

- F Cat
- G Bird
- н Grasshopper
- J Dandelion plant

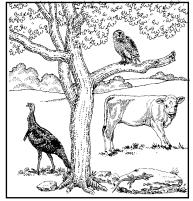
33 Soil is needed by plants because it gives the plants —

- **A** nutrients
- **B** rocks
- c sand
- D light



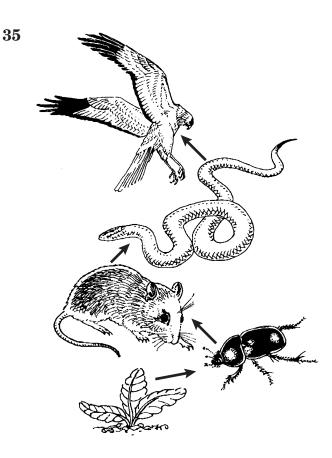


Picture 2



Between the times Picture 1 and Picture 2 were taken, which animal moved the most?

- **F** The owl
- G The calf
- н The turkey
- J The lizard



In the food chain above, what will likely happen if all of the mice leave the area?

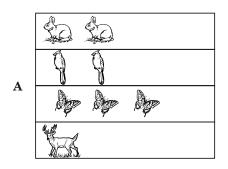
- A There will not be enough insects in the food chain.
- **B** The plants will increase in number.
- c Snakes will not have enough food.
- **D** The food chain will not be harmed.

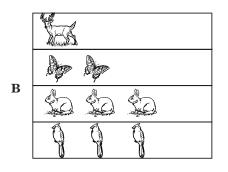
36 About how long does each season last?

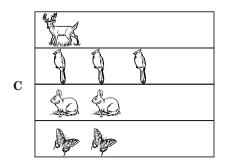
- **F** 3 minutes
- G 3 weeks
- H 3 months
- **J** 3 years

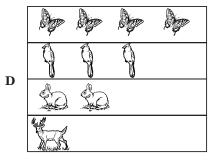


Which picture graph correctly shows the animals in the picture above?





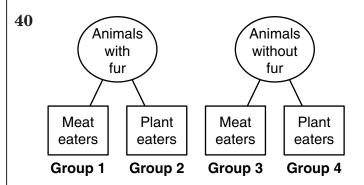




- 38 Which of these properties will change when a rock is broken?
 - F Its color
 - G Its shape
 - н Its hardness
 - J Its texture

39 Which direction is a compass needle attracted to?

- A North
- B South
- c East
- D West



A tiger belongs in which of the above groups?

- F Group 1
- G Group 2
- н Group 3
- J Group 4

- 13 -

STOF

Answer Key

Test Sequence	Correct Answer	Reporting Category	Reporting Category Description
1	В	018	Earth/Space Systems and Cycles
2	F	015	Scientific Investigation, Reasoning, and Logic
3	В	016	Force, Motion, Energy, and Matter
4	Н	017	Life Processes and Living Systems
5	В	016	Force, Motion, Energy, and Matter
6	Н	018	Earth/Space Systems and Cycles
7	В	018	Earth/Space Systems and Cycles
8	J	016	Force, Motion, Energy, and Matter
9	В	015	Scientific Investigation, Reasoning, and Logic
10	G	015	Scientific Investigation, Reasoning, and Logic
11	В	017	Life Processes and Living Systems
12	J	018	Earth/Space Systems and Cycles
13	А	016	Force, Motion, Energy, and Matter
14	G	017	Life Processes and Living Systems
15	Α	016	Force, Motion, Energy, and Matter
16	Н	018	Earth/Space Systems and Cycles
17	С	015	Scientific Investigation, Reasoning, and Logic
18	F	017	Life Processes and Living Systems
19	А	018	Earth/Space Systems and Cycles
20	Н	016	Force, Motion, Energy, and Matter
21	D	016	Force, Motion, Energy, and Matter
22	J	017	Life Processes and Living Systems
23	В	015	Scientific Investigation, Reasoning, and Logic
24	F	017	Life Processes and Living Systems
25	D	018	Earth/Space Systems and Cycles
26	F	015	Scientific Investigation, Reasoning, and Logic
27	D	017	Life Processes and Living Systems
28	F	017	Life Processes and Living Systems
29	С	016	Force, Motion, Energy, and Matter
30	Н	018	Earth/Space Systems and Cycles
31	В	015	Scientific Investigation, Reasoning, and Logic
32	J	017	Life Processes and Living Systems
33	А	018	Earth/Space Systems and Cycles
34	G	015	Scientific Investigation, Reasoning, and Logic
35	С	017	Life Processes and Living Systems
36	Н	018	Earth/Space Systems and Cycles
37	D	015	Scientific Investigation, Reasoning, and Logic
38	G	016	Force, Motion, Energy, and Matter
39	А	016	Force, Motion, Energy, and Matter
40	F	015	Scientific Investigation, Reasoning, and Logic