

FCAT

Florida Comprehensive Assessment Test

Student Name

SCIENCE
SAMPLE TEST BOOK

GRADE

5

matter



FCAT Sample Test Materials

These sample test materials are designed to help you prepare to answer FCAT questions. These materials introduce you to the kinds of questions you will answer when you take FCAT and include hints for responding to the different kinds of FCAT questions. The FCAT Science sample test materials for Grade 5 are composed of the books described below:

- Sample Test Book**
Includes a science sample test and instructions for completing the sample test. (Copies are available for all students in the tested grade.)
- Sample Answer Key**
Includes answers and explanations for the questions in the sample test. (Copies are available for classroom teachers only.)

= This book

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FCAT Science Sample Test Book



Taking the FCAT Science Sample TestPage 3

This section introduces the FCAT Science Sample Test. It includes a description of the different kinds of questions on FCAT, hints for answering FCAT science questions, and an estimate of the time required to complete the sample test.

FCAT Science Sample TestPage 5

The Science Sample Test consists of 16 practice questions that are similar to questions on the FCAT.

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Taking the FCAT Science Sample Test

Hints for Taking the FCAT Science Test

Here are some hints to help you do your best when you take the FCAT Science test. Keep these hints in mind when you answer the sample questions.

- ✓ **Learn how to answer each kind of question. FCAT Science tests have three types of questions: multiple-choice, short-response, and extended-response.**
- ✓ **Read each question carefully.**
- ✓ **Check each answer to make sure it is the best answer for the question asked.**
- ✓ **Answer the questions you are sure about first. If a question seems too difficult, skip it and go back to it later.**
- ✓ **Be sure to fill in the answer bubbles correctly. Do not make any stray marks around answer spaces.**
- ✓ **Think positively. Some questions may seem hard to you, but you may be able to figure out what to do if you reread the question carefully.**
- ✓ **When you have finished each question, reread it to make sure your answer is reasonable.**
- ✓ **Relax. Some people get nervous about tests. It's natural. Just do your best.**

How to Answer the “Read, Inquire, Explain” Questions

Answers to the short- and extended-response problems can receive full or partial credit. You should try to answer these questions even if you are not sure of the correct answer. If a portion of the answer is correct, you may get a portion of the points.

- ✓ **Allow about 5 minutes to answer the short “Read, Inquire, Explain” questions and about 10 to 15 minutes to answer the long ones.**
- ✓ **Read each question carefully.**
- ✓ **If you do not understand the question, read it again and try to answer one part at a time.**
- ✓ **Be sure to answer every part of the question.**
- ✓ **Reread your explanation to make sure it says what you want it to say.**

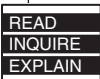
Directions for Taking the Science Sample Test

This Sample Test contains 16 science questions. It should take about 30 to 45 minutes to answer all the questions. You will mark your answers in this book. If you don’t know how to answer a question, just ask your teacher to explain it to you. Your teacher has the answers to the sample questions.

FCAT Science Sample Test



FCAT Question Symbols



This symbol appears next to questions that require short written answers. Use about 5 minutes to answer each of these questions.

A complete and correct answer to each of these questions is worth 2 points. A partially correct answer is worth 1 point.

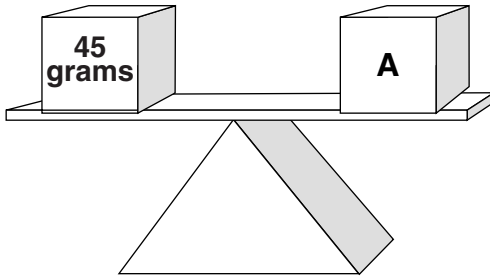


This symbol appears next to questions that require longer written answers. Use about 10 to 15 minutes to answer these questions.

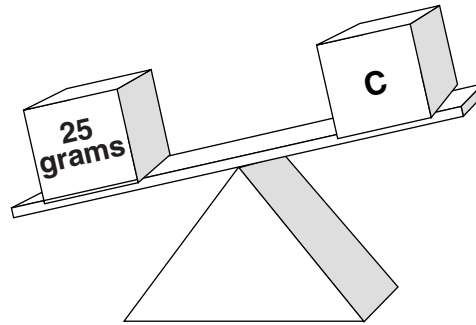
A complete and correct answer to each of these questions is worth 4 points. A partially correct answer is worth 1, 2, or 3 points.

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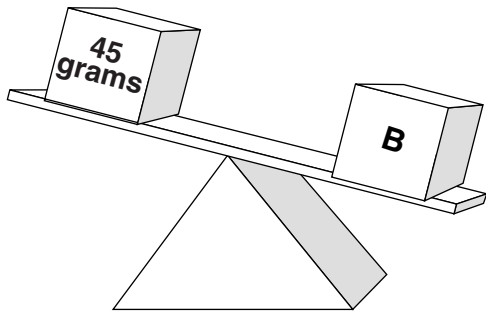
- 1 Henry is measuring the mass of four different blocks with letters on them. Look at the pictures below.



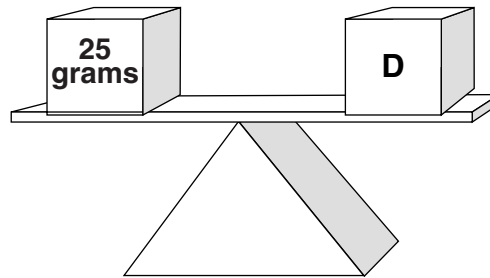
Balance A



Balance C



Balance B

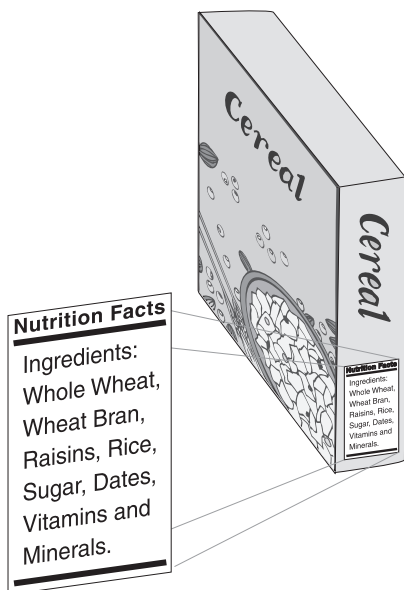


Balance D

Which block has the **greatest** mass?

- (A) Block A
- (B) Block B
- (C) Block C
- (D) Block D

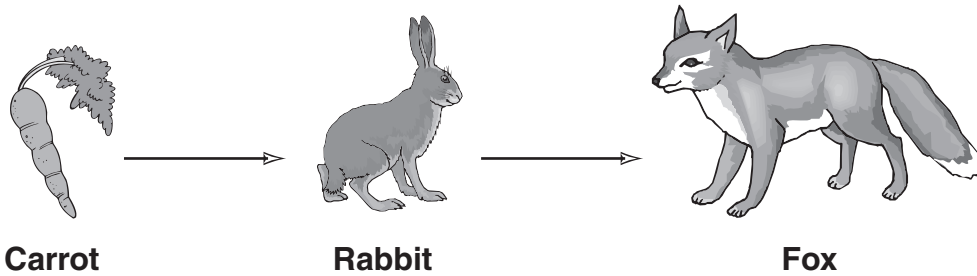
- 2 Cereals are made of many different ingredients. The diagram below shows some of these ingredients.



Which term describes the cereal?

- Ⓕ compound
- Ⓖ element
- Ⓗ mixture
- Ⓘ solution

- 3 Each living thing in a food chain plays a role in the flow of energy in an ecosystem. Below is a picture of a simple food chain. The rabbit eats carrots and the fox eats the rabbit.



What is the **primary** role of the rabbit in this food chain?

- Ⓐ to form a habitat
- Ⓑ to find a space to live
- Ⓒ to be a source of water
- Ⓓ to be a source of energy

- 4 For a special dinner, Catherine's mom lit some candles in the living room for decoration.



What two forms of energy does the fire from a burning candle release?

- Ⓕ light and heat
- Ⓖ sound and chemical
- Ⓗ magnetic and nuclear
- Ⓘ electrical and mechanical

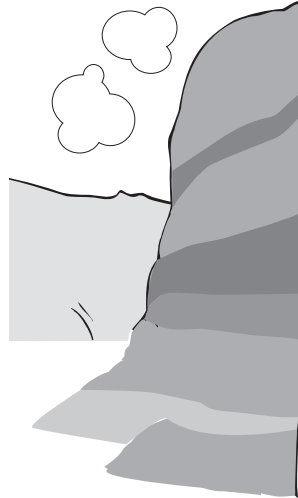
- 5 Mr. Gates mops the gymnasium floor every day. When he finishes mopping, he puts up the sign shown below.



The effect of which force is weakened when the floor is wet?

- Ⓐ friction
- Ⓑ gravitation
- Ⓒ inertia
- Ⓓ magnetism

- 6 The sides of the Grand Canyon show many different layers of rocks.



Which statement describes how the Grand Canyon was formed?

- Ⓕ The canyon once had a waterfall.
- Ⓖ Big rainstorms washed rocks out of the canyon.
- Ⓗ A flowing river cut into the rocks to form the canyon.
- Ⓘ The canyon was formed from rocks that came from other places.

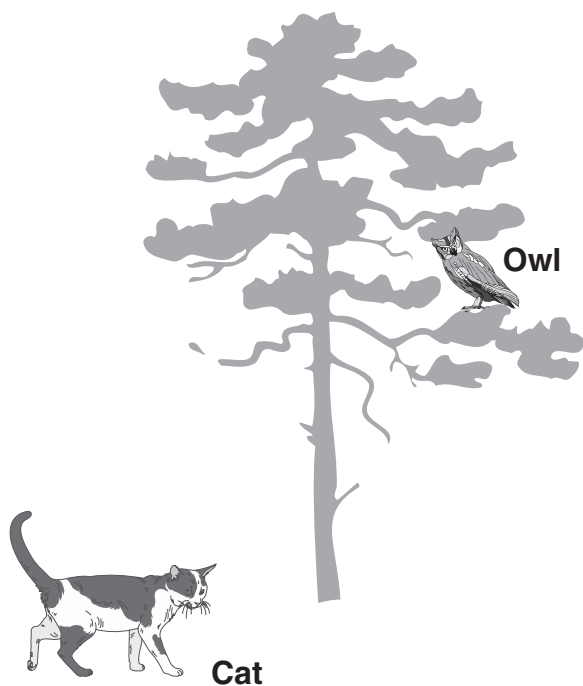
- 7 Keisha knows that Earth rotates on its axis. What evidence indicates Earth is rotating on its axis?
- (A) There is a day and a night.
 - (B) There are 365 days in each year.
 - (C) There are four phases of the Moon.
 - (D) There are different seasons of the year.

- 8 In regions near the North and South Poles, the Sun does not set for several months in the summer. These areas, such as the northern parts of Alaska and Norway, are called the “land of the midnight Sun,” because the Sun remains visible for 24 hours a day.

READ
INQUIRE
EXPLAIN

Why is the Sun visible for so many hours during the day? Explain your answer.

- 9 Allison could hear animals in her backyard. When she looked out her window, she saw a cat and an owl.



How are cats and owls alike?

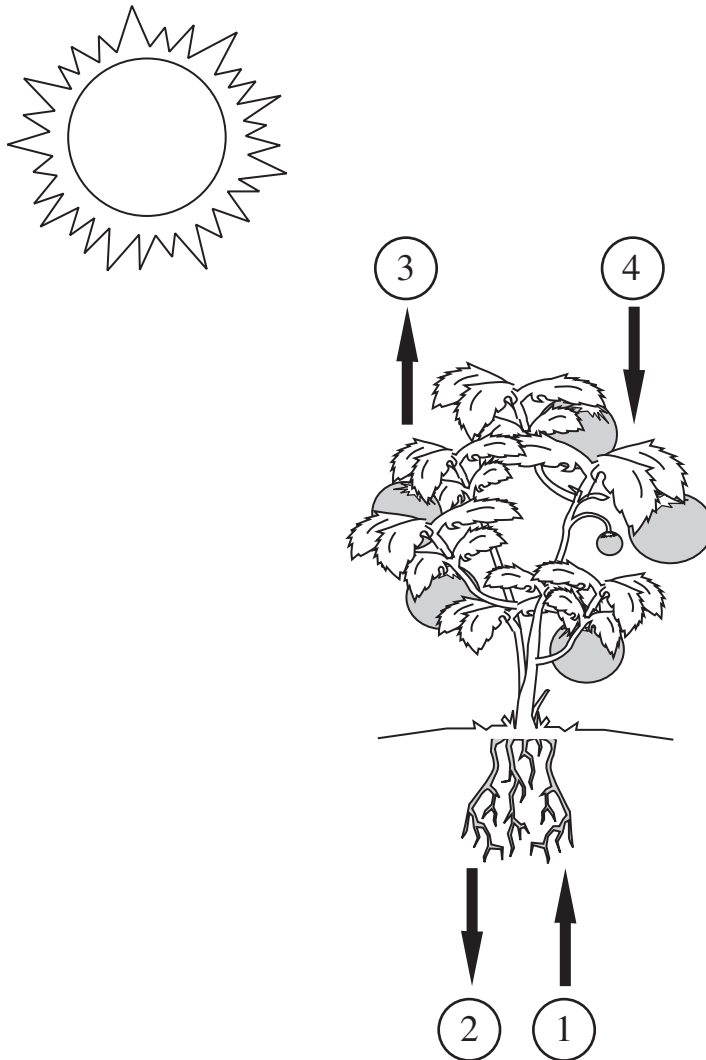
- F They are mammals.
- G Their eyes are blue.
- H They can see well at night.
- I Their fur keeps them warm.

- 10 Armadillos and coral snakes both live in Florida. When an armadillo is threatened, it can curl up. Its armored body looks like a ball. A coral snake curls its tail into a tight spiral and holds it up when an enemy is near. This attracts the enemy to its tail and protects its head.

Although these animals are very different, what is one way in which they are similar?

- Ⓐ They spend a lot of time in the water.
- Ⓑ They have ways to protect themselves.
- Ⓒ They use their bodies to attack enemies.
- Ⓓ They have hard outer layers of skin for protection.

- 11 After studying photosynthesis, Jesse drew the illustration of a tomato plant shown below.

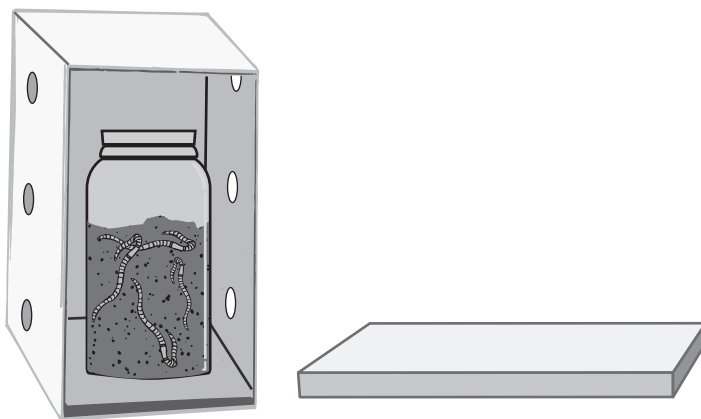


Which arrow represents where the **primary** release of oxygen (O_2) occurs?

- F 1
- G 2
- H 3
- I 4

- 12 Celia saw a goldfish at the pet store that was living in a tank by itself. She bought the fish, took it home, and put it in her aquarium with her other goldfish. What must the new goldfish do to survive in its new environment?
- Ⓐ It must camouflage itself in its new surroundings.
 - Ⓑ It must compete with other goldfish for resources.
 - Ⓒ It must allow other goldfish to use the limited resources first.
 - Ⓓ It must build a home that is similar to the one in its previous habitat.

- 13 Jim was planting a garden and a friend suggested he put worms in his garden. Jim wanted to do an experiment to find out what worms do for gardens. Jim put soil, food, and worms in a clear jar. He placed a shoebox with holes cut in it on its side and put the jar in it. The lid was kept on the shoebox, except when Jim was making an observation.

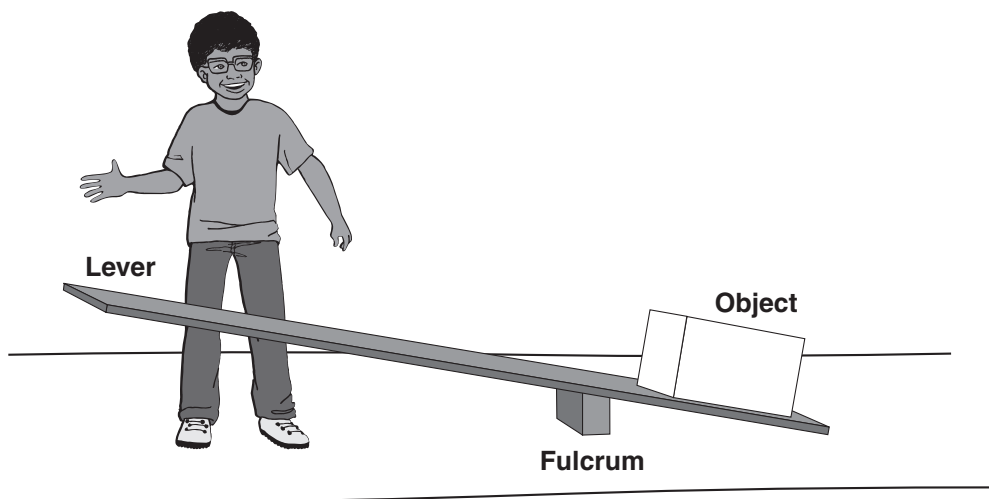


If Jim does his experiment correctly, what will he do each time he takes the lid off the shoebox?

- Ⓕ add more worms to the jar
- Ⓖ write down what he sees in the jar
- Ⓗ try to guess where the worms will be
- Ⓘ plan what he will do next in the experiment

14

Robert is designing a demonstration to display at his school's science fair. He will show how changing the position of a fulcrum under a lever changes the amount of force needed to lift an object. To do this, Robert will use a piece of wood for a lever and a block of wood to act as a fulcrum. He plans to move the fulcrum to different places under the lever to see how its placement affects the force needed to lift an object.

READ
INQUIRE
EXPLAIN

Part A Identify at least two other actions that would make Robert's demonstration better.

Part B Explain why each action would improve the demonstration.

- 15 Cities have water purification programs to keep the drinking water free from bacteria and other pollutants. How does this help people living in these cities?
- Ⓐ It eliminates filters from factories.
 - Ⓑ It produces large amounts of water.
 - Ⓒ It helps people by cleaning the air they breathe.
 - Ⓓ It helps people by purifying the water to make it safer to use.
- 16 Mr. Brown wonders how minerals affect animal growth and decides to conduct an experiment with his chickens. He begins with 3 buckets containing exactly the same amount of chicken feed and then adds the same amount of 2 different minerals to two of the buckets. He adds calcium to one bucket, magnesium to another bucket, and he doesn't add any minerals to the third bucket. What scientific term is used to describe the mineral placed in each bucket?
- Ⓕ control
 - Ⓖ hypothesis
 - Ⓗ specimen
 - Ⓘ variable



This is the end of the Science Sample Test.
Until time is called, go back and check your work or answer questions you did not complete. When you have finished, close your Sample Test Book.



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