
Posttest

Grade 3 • Science



Student Test Booklet

FOCUScurriculum

Publishing to Indiana's Content Standards

Published by FOCUScurriculum

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Hudson, OH 44236

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www.focuscurriculum.com

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Order Number: INSC-Post3

Created by Kent Publishing Services, Inc.

Designed by Signature Design Group, Inc.

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Grade 3 Science Posttest

Indiana's Academic Standards for Science Tested with Answers

Item	Standard	Answer
1	3.1.2	C
2	3.1.3	The sound travelled through air.
3	3.1.4	Light travels in a straight line.
	3.1.5	The light is refracted, or bent, by the object as it passes through it.
4	3.1.6	A
5	3.2.2	D
6	3.2.3	A
7	3.2.4	A
8	3.2.1	Rock number: 3
	3.2.1	luster
	3.2.1	Property: luster
9	3.2.5	A natural resource is something found in nature that people use.
10	3.2.5	Answers may include soil, water, and light
11	3.2.6	Answers may include such things as plants, animals, water, minerals, fossil fuels, and other natural resources and explain how people use them to survive, to make work easier, or for pleasure.
12	3.3.1	B
13	3.3.2	A
14	3.3.2	ruler or tape measure, clock, calendar The data does not support Jennifer's prediction. The plant did not grow at a constant rate. It is important to communicate results so that other scientists can learn from the experiment and replicate it to validate the results. Conclusion may include that the plant did not grow at a constant rate. The plant grew more quickly during the first four weeks. The plant grew more slowly during the last two weeks. The plant grew taller from week one through week 6.
15	3.3.2	C
16	3.4.2	pulley

Print Pages 4 through 12 for the Students Test Booklet.

GRADE 3

3

SCIENCE POSTTEST

Student Name _____

School Name _____

Print your name and the name of your school on the lines above.

This test contains 8 multiple-choice questions. Record your answers to these questions on the separate answer sheet. Use only a No. 2 pencil on your answer sheet.

This test consists of 8 extended response items. Write your answers to these on the lines provided in the test booklet.

You will have as much time as you need to answer the questions.

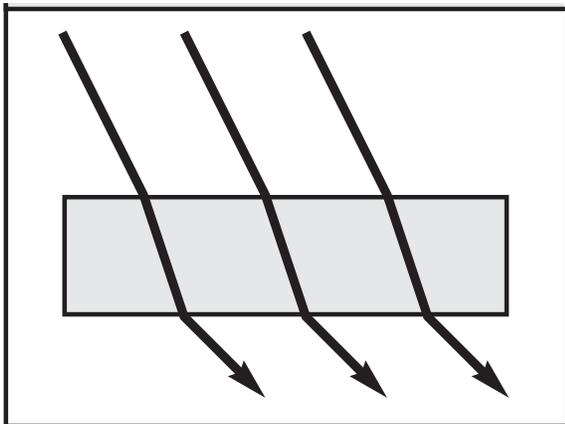
DO NOT TURN THIS PAGE UNTIL YOU ARE TOLD TO DO SO.

1. You pluck a rubber band and hear the sound it makes. You then tighten the rubber band and pluck it again. What effect did tightening the rubber band have on the second sound?

- A. The second sound has a higher amplitude than the first.
- B. The second sound has a lower amplitude than the first.
- C. The second sound has a higher pitch than the first.
- D. The second sound has a lower pitch than the first.

2. You are driving down a street when you hear a car beep its horn. What did the sound travel through in order for you to hear the horn?

3. The illustration below shows light hitting an object.



Explain how light travels before it hits an object.

Explain what happens to the light after it hits the object.

4. Light and sound are forms of

- A. energy
- B. matter
- C. reflection
- D. refraction

5. Juan finds a rock and wants to know what type it is. What information about the rock will best help him identify it?

- A. the size of the rock
- B. the weight of the rock
- C. the temperature of the rock
- D. the minerals the rock contains

6. When a student rubs a mineral on a special plate it leaves a mark. This property is called

- A. streak
- B. luster
- C. cleavage
- D. specific gravity

7. A student finds a rock in the shape of a plant. This rock is most likely a

- A. fossil
- B. diamond
- C. pebble
- D. mineral

8. Emma was observing four rock samples she collected. She classified the rocks and recorded her observations in a table shown below.

Property				
Rock	A. _____	B. Specific Gravity	C. Color	D. Texture
1	Metallic but dull	1.2	gray	rough
2	Metallic and shiny	2.3	black	smooth
3	Nonmetallic and pearly	2.6	white	smooth
4	Nonmetallic and dull	1.7	pink	rough

Which rock has the highest specific gravity? Rock number: _____

Identify property A. _____

The rocks can be sorted by their properties. Identify the property used to sort the rocks shown below.

Group 1
2, 3

Group 2
1, 4

Property: _____

9. Earth provides people, animals, and plants with natural resources. Explain what a natural resource is.

10. Identify TWO natural resource that animals use to survive.

11. Identify ONE natural resource that people have altered to meet their needs to survive. Explain how that resource is used by people.

12. One function of a plant's stem is to

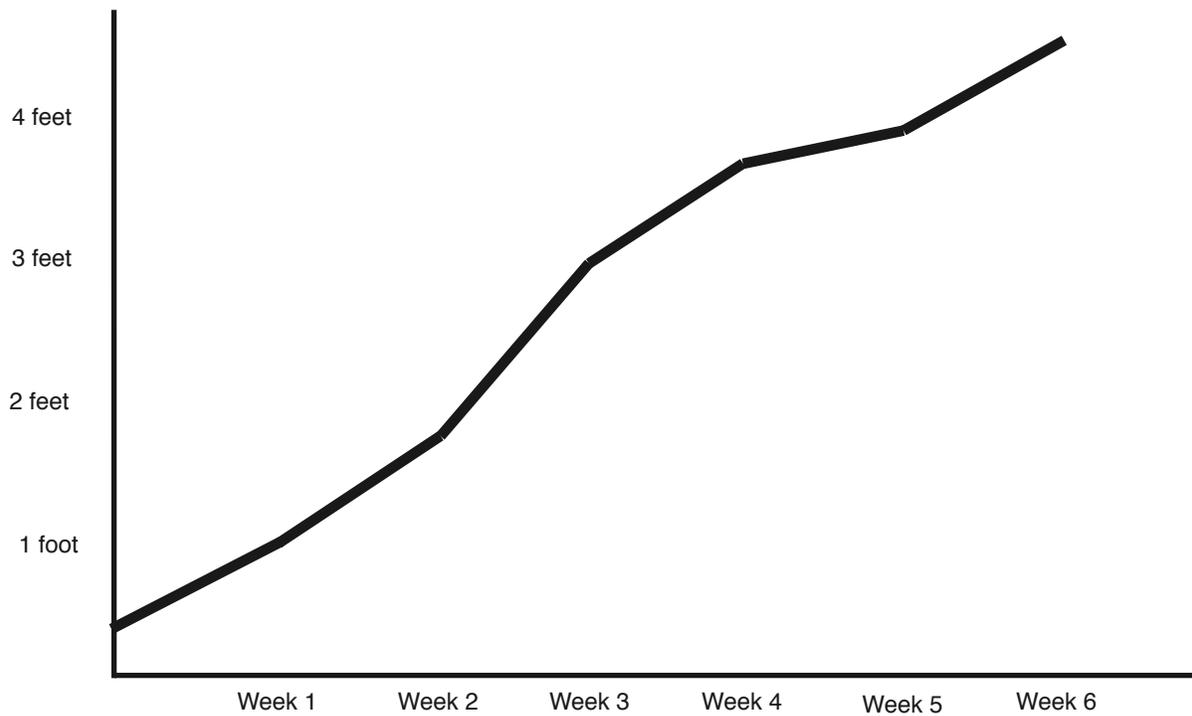
- A. take in nutrients
- B. transport water and nutrients
- C. produce fruit
- D. use sunlight to make food

13. The amount of time that a plant is alive is called its

- A. life span
- B. life cycle
- C. reproduction
- D. germination

14. Jennifer was observing a sunflower plant growing in the school garden. She predicted that the sunflower would grow a similar amount each week due to the fact that daylight hours would increase each day from spring to summer. She performed a science experiment in which she did the following:

- She measured the height of the sunflower plant on the same day at the same time for six weeks.
- She recorded her measurements in a line graph shown below.



Name TWO tools Jennifer used to complete her experiment.

Does the data in the chart support Jennifer's prediction? Explain why or why not.

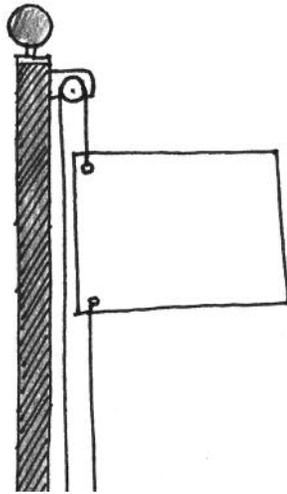
Jennifer's teacher told her that it was important to share her findings with her class. Give one reason why it is important for scientists to communicate their results to one another.

What are TWO conclusions can you make from reading the data in the line graph?

15. Flowers are used during which part of the plant life cycle?

- A. maturation
- B. germination
- C. reproduction
- D. death

16. The diagram below shows a flag being raised on a flag pole.



Identify the simple machine being used.

Answer Sheet

1. (A) (B) (C) (D)
2. Extended Response
3. Extended Response
4. (A) (B) (C) (D)

5. (A) (B) (C) (D)
6. (A) (B) (C) (D)
7. (A) (B) (C) (D)
8. Extended Response

9. Extended Response
10. Extended Response
11. Extended Response
12. (A) (B) (C) (D)

13. (A) (B) (C) (D)
14. Extended Response
15. (A) (B) (C) (D)
16. Extended Response