

ORANGE PUBLIC SCHOOLS  
OFFICE OF CURRICULUM AND INSTRUCTION  
OFFICE OF SCIENCE

# **GRADE 4 SCIENCE**

## **Unit 3**

## **I-Check 2**



School Year 2014-2015

# Directions for Grade 4 I-Check 2 Assessment

The Grade 4 I-check assessment is made up of multiple choice questions, constructed response questions and performance questions.

Read each question carefully, including diagrams and/or graphs.

Work as rapidly as you can without sacrificing accuracy. Do not spend too much time puzzling over a question that seems too difficult for you. Answer the easier questions first; then return to the harder ones. Try to answer every question, even if you have to guess.

Where necessary, you may use scratch paper for your work. Do not use the margins of the test booklet to do scratch work.

**FOR ALL QUESTIONS, YOU MUST RECORD ALL OF YOUR ANSWERS ON THE TEST BOOKLET.**

# I-CHECK

## Investigation 2—Growing Further

Name \_\_\_\_\_

Date \_\_\_\_\_

21. Andrew wants to set up a hydroponics container for bean seedlings. He has the water, the container, and bean seedlings.

What are two more things he needs that are normally provided by soil?

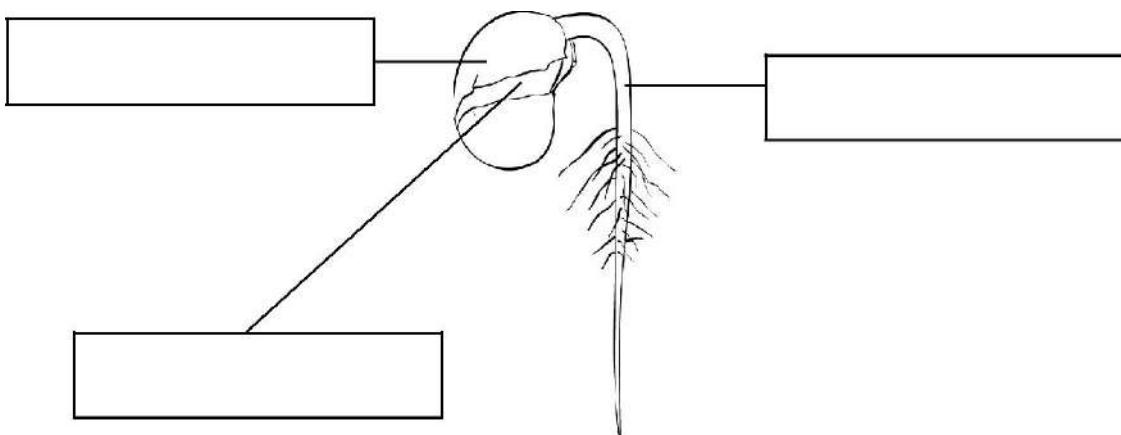
(1) \_\_\_\_\_

(2) \_\_\_\_\_

22. Look at the picture of the bean seedling.

- a. Label the different parts of the seedling.

<b>cotyledon</b>	<b>root</b>	<b>seed coat</b>
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- b. Describe the function of each of the parts.

seed coat \_\_\_\_\_  
\_\_\_\_\_

cotyledon \_\_\_\_\_  
\_\_\_\_\_

root \_\_\_\_\_  
\_\_\_\_\_

- c. What will be the next new structure to grow on the plant? \_\_\_\_\_



# I-CHECK

Name

## Investigation 2—Growing Further

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23. Which structure of a plant produces the fruit?

*(Circle the one best answer.)*

- A. root
- B. cotyledon
- C. flower

24. a. Mark an X next to the *one* most important thing needed for a seed to germinate.

- ☐ air
- ☐ light
- ☐ nutrients
- ☐ support
- ☐ water

b. Mark an X next to *each* of the following that is needed for a plant to grow and complete a life cycle.

*(Mark all that apply.)*

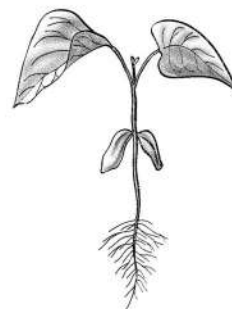
- ☐ air
- ☐ light
- ☐ nutrients
- ☐ support
- ☐ water

# I-CHECK

Name \_\_\_\_\_

## Investigation 2—Growing Further

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25. The pictures above show the life cycle of a bean plant. Number the pictures in the order that shows the growth of the bean plant, starting with the seed.

26. a. When a seed germinates, why does the root grow first?

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b. Where does the seed get the food to begin growing the root?

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# I-CHECK

Name

## Investigation 2—Growing Further

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27. What does a seed contain that provides energy for germination?

*(Circle the one best answer.)*

- A. water
- B. stored food
- C. soil
- D. sunlight

28. The main purpose of a plant's flowers is to

*(Circle the one best answer.)*

- A. provide support.
- B. transport water.
- C. produce seeds.
- D. produce food.

29. The leaves on a houseplant are drooping, but the leaves are still green. What does the plant need?

*(Circle the one best answer.)*

- A. water
- B. sunlight
- C. food
- D. air



