Colegio Metropolitano
Sixth grade ENCINO PINO SAUCE
Science
Miss Alisson Coronado

Colegio METROPOLITANO
Commitment to Excellence

Knowledge Check 1

Name: _____ Code: _____

I UNIT – Date: _____

Contents to evaluate: Photosynthesis, biotic and abiotic factors, autotroph and heterotrophs

Mark the correct answers with a ✔.

Look at the images and answer questions 1–3.



1



2



3

1 What characteristics do all three have in common?

I. All consist of cells.

II. All reproduce.

III. All require energy.

A. I.

B. III.

C. I and III.

D. I, II and III.

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2 How do these organisms obtain energy?

A. Digestion.

B. Nutrition.

C. Absorption.

D. Feeding.

3 Which organisms are heterotrophic?

A. 1.

B. 1 and 2.

C. 2 and 3.

D. 1, 2 and 3.

4 How do autotrophic and heterotrophic organisms differ?

A. Heterotrophs feed on other organisms.

B. Heterotrophs transform inorganic material into organic material.

C. Heterotrophs get energy only from plants.

D. Autotrophs get energy only from animals.

5 Which of the following organisms is an autotroph?

A. A spider.

B. A fungus.

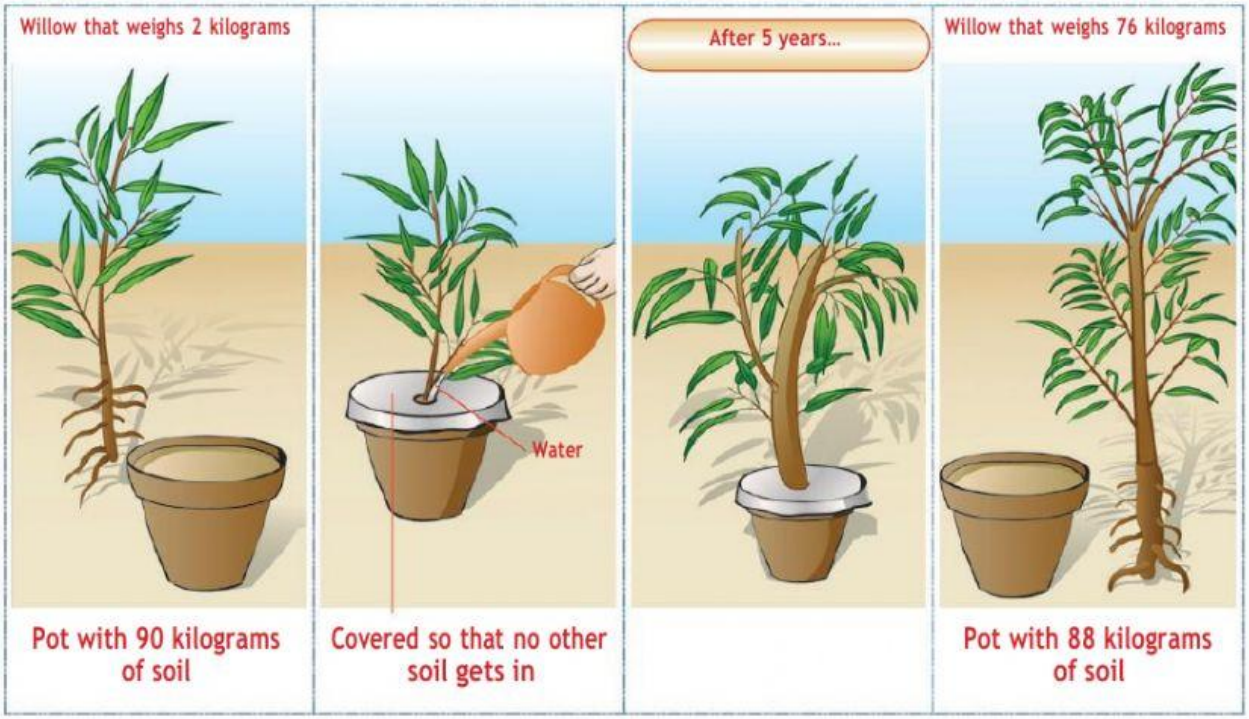
C. A shark.

D. A bamboo plant.

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Study Van Helmont's experiment and answer questions 6 and 7.



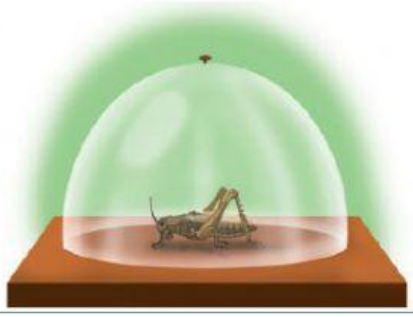
6 What hypothesis was Van Helmont attempting to prove with his experiment?

7 Which variables were not controlled in this experiment?

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8 In which situation would the grasshopper survive longer and why?

Situation A	Situation B
	

A. In Situation B, because the plant releases oxygen into the environment.

B. In Situation B, because the plant introduces carbon dioxide into the environment.

C. In Situation A, because the plant in B absorbs all the available oxygen.

D. In both situations the grasshopper will survive the same amount of time.

Study the photosynthetic chemical reaction and answer questions 9–12.



What would happen if there were no carbon dioxide?

9 _____

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10 What would happen if the light came from a lightbulb instead of the sun?

A. Photosynthesis would not take place because it requires energy from the sun.

B. Photosynthesis would take place normally because light energy is present.

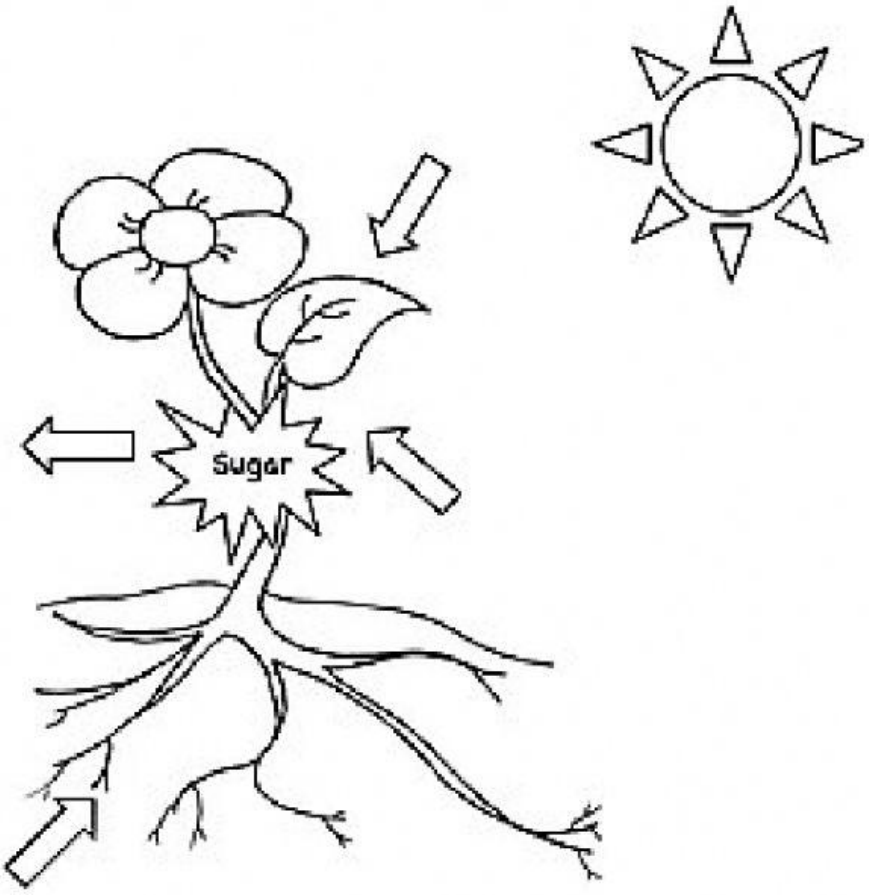
C. Photosynthesis would take place because carbon dioxide and water is present.

D. Photosynthesis would take place, but its products would be changed.

11 Which are the nutrients obtained from the photosynthetic process?

_____

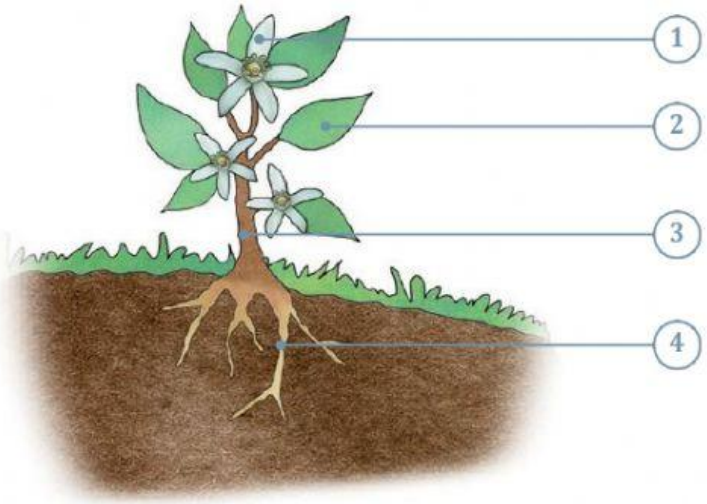
Complete the diagram that explains the process of photosynthesis. Include the factors needed and the result of it.



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Study the image and answer <u>questions 13 and 14</u>.



13 Which part of the plant absorbs water for photosynthesis?

A. 1.

B. 2.

C. 3.

D. 4.

14 What would happen to the plant without structure 2?

A. It would not be able to take in water from the soil.

B. Glucose production would be affected.

C. Release of oxygen into the environment would increase.

D. Capture of carbon dioxide from the air would increase.

15 Which factors affect photosynthesis?

I. Temperature.

II. The amount of light.

III. The amount of water.

A. II.

B. I and II.

C. II and III.

D. I, II and III.

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