

Name:

Class:

Date:

Activity 15.2A: Edible Soil Profile Lab Worksheet

Materials Needed

- Clear plastic cup
- 1 chocolate sandwich cookie
- Crumbled chocolate chip cookies
- Vanilla pudding
- Chocolate pudding
- Gummy worms
- Sprinkles
- Spoons and/or spatulas

Section One: Soil Formation

Answer the following questions using information from your notes.

1. List the five factors that influence soil formation.

Answer:

2. Which factor is most important in soil formation? Explain your answer.

Answer:

Section Two: Soil Horizon Creation

Follow the instructions to create a soil horizon model and then answer the questions about your model. Wash your hands before you begin.

1. Construct an edible soil profile as follows. *Do not eat until given permission.*
 - A. Place the sandwich cookie (Horizon R) in the bottom of a plastic cup.
 - B. Place a layer of crumbled chocolate chip cookies (Horizon C) on top of the sandwich cookie.
 - C. Place a layer of vanilla pudding (Horizon B) on top of the crumbled chocolate chip cookies.
 - D. Place a layer of chocolate pudding (Horizon A) on top of the vanilla pudding.

- E. Add sprinkles (Horizon O) and place 2 to 3 gummy worms on the top.

Complete the following worksheet about the function of soil horizons found in your model.

- 2. Horizon O (sprinkles/worms)

Function in Soil

Answer:

- 3. Horizon A (chocolate pudding)

Function in Soil

Answer:

- 4. Horizon B (vanilla pudding)

Function in Soil

Answer:

- 5. Horizon C (crumbled cookies)

Function in Soil

Answer:

- 6. Horizon R (sandwich cookie)

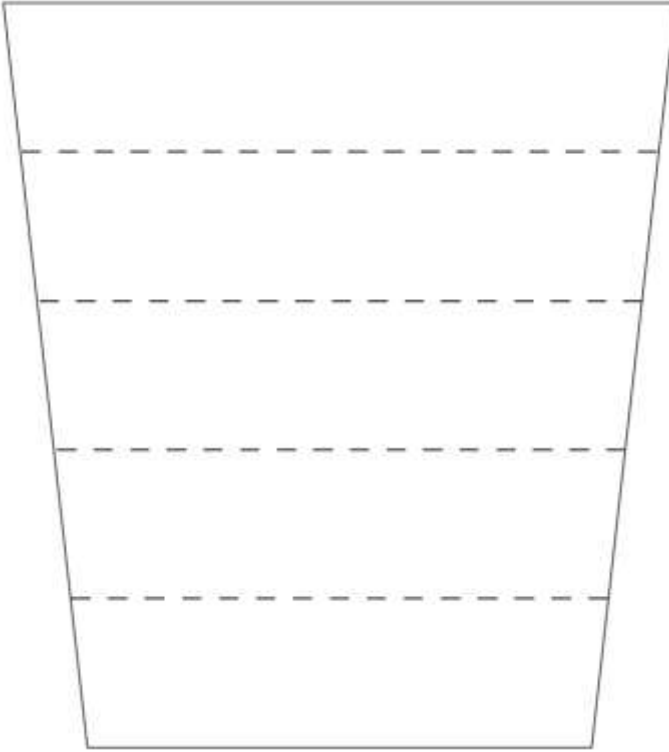
Function in Soil

Answer:

Section Three: Analysis and Conclusion

Complete the following upon conclusion of the lab.

1. Draw, color, and label the horizons of your edible soil.



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2. Discuss the use of each of the components of your model. Explain why each material was used to represent each layer.

3. Chocolate pudding

Horizon

Answer:

Why was this material used?

Answer:

4. Vanilla pudding

Horizon

Answer:

Why was this material used?

Answer:

5. Sandwich cookie

Horizon

Answer:

Why was this material used?

Answer:

6. Sprinkles

Horizon

Answer:

Why was this material used?

Answer:

7. Gummy worms

Horizon

Answer:

Why was this material used?

Answer:

8. Chocolate chip cookies

Horizon

Answer:

Why was this material used?

Answer: