

**The Primary Stage of Grades (4-5)
School Year 2022 - 2023**

Name: _____

**Unit (11): Types of Soil
Worksheet (1)**

Date: / /

Grade 5 CP (All sections)

Objective:

- Learn that soil can be classified based on their clay, sand and organic content.
1. The top layer of the soil contains a lot of organic matter. What is this organic matter called? Circle the correct answer.

humus

loam

silt

2. We can classify soil according to the amount of sand, clay and organic material it contains.

Complete the sentences. Choose from the following words.

| | | | | |
|-------------|----------------|-------------|--------------|---------------|
| clay | fine | less | humus | loose |
| more | organic | sand | silt | sticky |

- Sandy soil is made up mostly of _____. It is very _____.
- Clay soil contains a large amount of very _____ particles. It is _____.
- Silty soil contains small rock particles, minerals and _____.
- Loam soil is a mix of _____, _____ and sand. It has _____ humus than silty soil.

3. Loam soil is suitable for growing crops. Why?

Tick (✓) the **two** correct answers.

- It can be found near rivers.
- It contains the nutrients needed by plants to grow.
- It holds water but also allows excess water to drain away.
- It remains wet during wet seasons.

4. Various conditions can change the composition of soil.

How does dead plant and animal matter change the composition of soil?

Circle the correct answer.

it makes the soil drier

it makes the soil harder

it makes the soil more fertile

5. A farmer grows corn plants in his field.

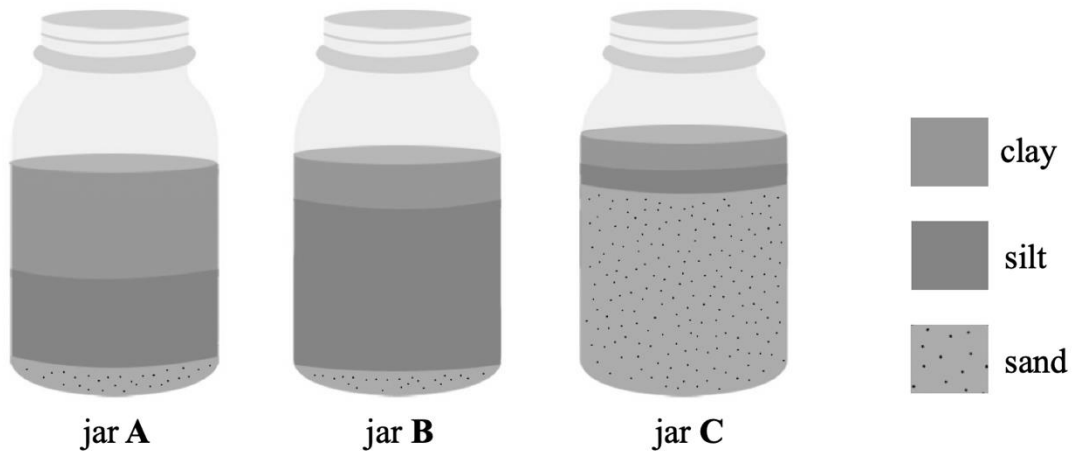
After he harvests the corn, he replaces the corn plants with soya bean plants.

How does rotating crops help maintain the composition of the soil?

Tick (✓) the correct answer.

- It adds fertilizer to the soil.
- It removes the top layer of the soil.
- It returns the nutrients to the soil.

6. Sanad collects soil samples from three different places. He adds each soil sample into a jar and fills the jar with water. He shakes the jars and leaves them aside for one day. The diagrams show the contents of the jars after one day.



(a) Which jar contains soil that cannot hold water? How do you know?

(b) Identify the type of soil in each jar. Use the following words.

| | | |
|------------------|-------------------|-------------------|
| clay soil | sandy soil | silty soil |
|------------------|-------------------|-------------------|

Jar A: _____

Jar B: _____

Jar C: _____

7. Cala grows two plants in different types of soil. She measures the height of the plants every two days. The table shows her results.

| Day | Height of plant in soil A (cm) | Height of plant in soil B (cm) |
|-----|--------------------------------|--------------------------------|
| 0 | 2.0 | 2.0 |
| 2 | 2.4 | 2.5 |
| 4 | 3.8 | 4.0 |
| 6 | 4.3 | 6.9 |
| 8 | 5.6 | 9.2 |
| 10 | 7.2 | 12.0 |

(a) Which of these should Cala do to make her **investigation a fair test**? Circle the correct answer.

use different kinds of plants

use the same amount of soil

use the same type of soil

(b) Identify the **dependent variable** in this investigation.

.....

(c) Identify the **independent variable** in this investigation.

.....

(d) What can Cala **conclude** from her results?

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