

**PENANG SANGAM HIGH SCHOOL**  
**P.O.BOX 44, RAKIRAKI**  
**LESSON NOTES**

**School: Penang Sangam High School**  
**Subject: Agricultural Science**  
**Year/Level: 9**

**Week 14**

<b>Strand</b>	<b>AS 9.3 AGRONOMY</b>
<b>Sub Strand</b>	<b>AS 9.3.1 SOILS</b>
<b>Content Learning Outcome</b>	<b>Recognise and evaluate soil by identifying and relating the four components of soil to soil use, husbandry practices and soil enhancement.</b>

**LESSON THREE: SOIL FORMATION**

*Lesson outcome: At the end of this lesson the student will: i. identify 5 factors responsible for the formation of soil*

-  Burrow - make a hole or tunnel into a material
-  Deposit - set down in a place
-  Erode - gradually wear away
-  Glacier - slowly moving mass or river of ice

**NOTES**

**There are five factors which work together to form soil.**

<b>1. Parent material</b>	Organic material, partially weathered rock, volcanic ash, deposited sediment and rock moved by glaciers are all part of the parent material of soil.
<b>2. Climate</b>	Precipitation, wind and changing temperature all cause rocks to weather.
<b>3. Topography</b>	Soil is removed from steep slopes so the rocks which are exposed can be weathered. The eroded soil is deposited on the level land at the bottom of steep slopes resulting in deeper soil.
<b>4. Biological activity</b>	Plants and animals burrow into soil and soft rocks, so mix and aerate soil. Also they break the rocks to form soil.
<b>5. Time</b>	New soil is always being formed as weathering is a very slow process. It sometimes takes two hundred years to form <b>1cm<sup>3</sup></b> of soil.

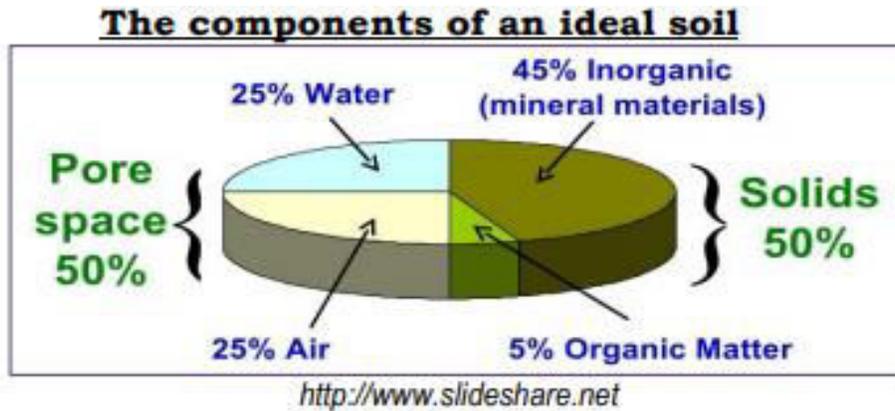
## LESSON FOUR: COMPONENTS OF SOIL

*Lesson outcome: At the end of this lesson the student will identify the four components of soil.*

- ✚ Components - parts that make up a whole.
- ✚ Soil Pores - area between solid particles in soil in which air and water are stored.

### NOTES

- ✚ Soil is composed of equal proportions of solids and the spaces between them.
- ✚ The solids are divided into inorganic material and organic material.
- ✚ The spaces between the solids are called pores. Pores are filled with air and water.



### Student Activity

1. What is soil pores.

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2. What is soil pores filled with?

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3. How much percent of water is in an ideal soil.

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4. How much percent of organic matter is in an ideal soil.

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