IB ESS **Soil** **name:** _____

Part A: Soil as a System

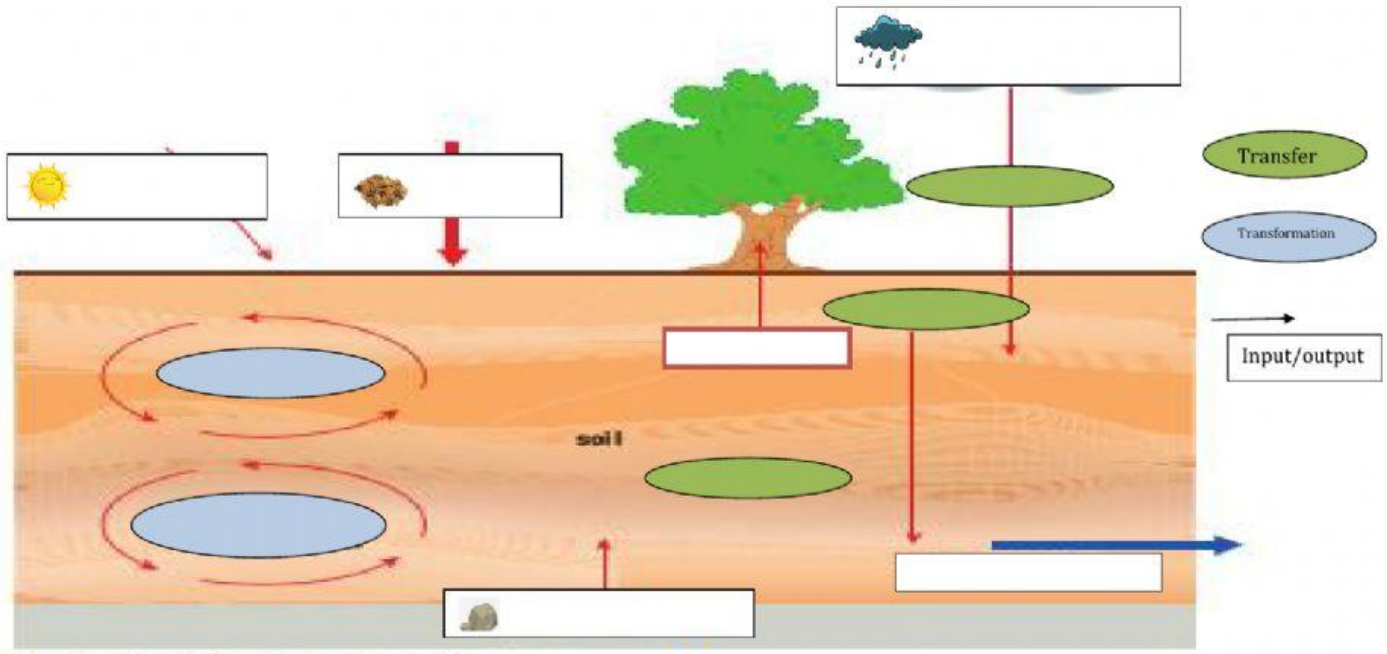
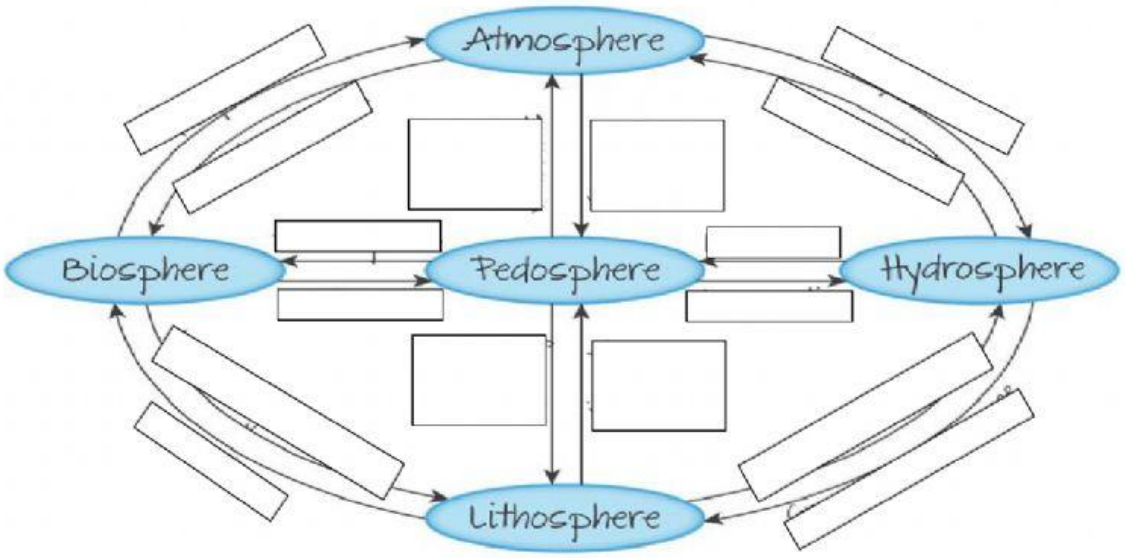


Figure 5.1.5 The soil system

LIVEWORKSHEETS

Soil erosion	energy	Precipitation	decomposition	Weathering and nutrient cycling	Uptake by plants
Leaching	Biological mixing	Infiltration	Parents material	Organic matter	

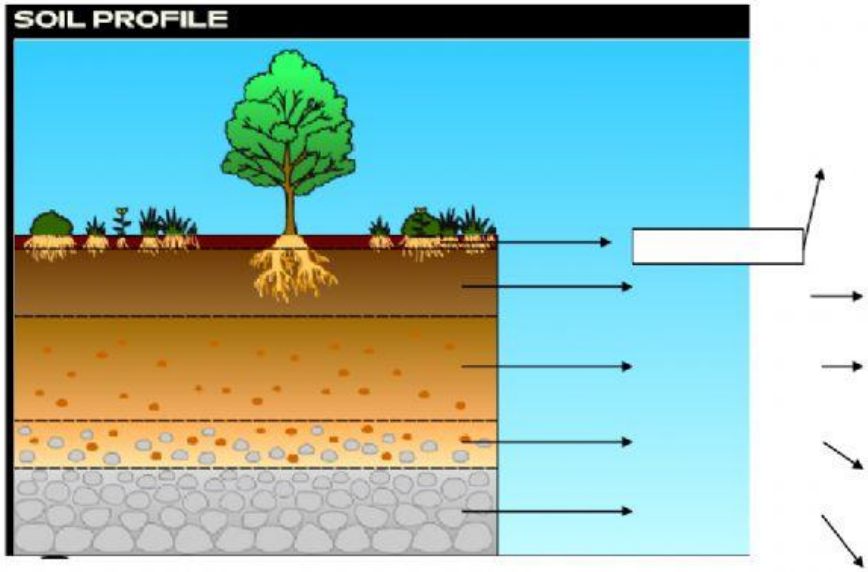
Part B: Soil link to other system



LIVEWORKSHEETS

Part C: Soil Profile

Name each of the soil layers and describe its content.



Part D Soil texture

Soil is a mixture of _____ + _____ + _____ + _____

Soil texture is a measure of the volume proportions of _____, _____ and _____

Soil texture determines:

- _____ which is the water holding capacity of the soil and

LIVEWORKSHEETS

- _____ which is the rate at which water moves through it

Rate the following soil types with relation to permeability (sand, clay)

Low permeability high permeability

Loam is best for growing crops as they have a mix of

_____ at the volume proportion of ____%

_____ at the volume proportion of ____%

_____ at the volume proportion of ____%

A HORIZON	O HORIZON	B HORIZON	R HORIZON	C HORIZON

Bedrock (a Continuous mass of rock)
"Parent Material"

Made of large rocks or partially broken down bedrock.
There is little weathering, nutrients, or organic matter

"Top soil"
Leaf Litter and other detritus
Lots of roots and organisms
Little decomposition is obvious

"Top soil"
Detritus is smaller pieces. Lots of nutrients and minerals
Lots of roots & organisms

"Subsoil"
Rich in clay and minerals.
Red or brown due to the minerals

LIVEWORKSHEETS