E.T. A LOCAL WAY OF LEARNING

Title: DECOMPOSITION

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Grade Level: 4

Concepts:
2. Ecosystem
6. Resources
9. Change

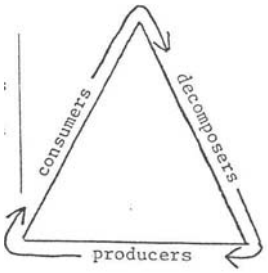
Disciplines:
1.Science
2.Social Studies
3.Mathematics

Objective:

The student shall see what happens to animals after they die and demonstrate that the products of decomposition enrich the soil by growing plants in the same soil. Student shall learn some anatomy from the bones.

Rationale:

Decomposition is one leg of the energy cycle; producers (plants), consumers (animals), and decomposers CO such as soil bacteria and larger soil animals (ants, earthworms, etc.) that serve to break down and return to the cycle the N, P and K-- Nitrogen, Phosphorus and Potassium needed for plant growth."



Materials Needed:

Cans of soil, small shovel, dead animals, seeds.

Directions:

Take soil from one spot in the yard. Place equal amount into two similar containers (can, pot, etc.). Bury a dead animal in one container. Leave second container with soil only. The animal might be a lizard, frog, fish, bird, mouse, mongoose or a classroom pet that died. Uncover the animal at monthly intervals and note changes. 14hen total decomposition takes place, remove the skeleton and determine various body parts . Plant an easy to grow seed (flambouyant, beans, etc.) in each of the containers. Treat them identically and make a chart of differences in plant growth.

Upon completion of lesson/activity, discuss with children how nature continually recycles itself - decomposed fruit, plants, leaves, animals adding nutrients to the soil for new growth.

Teacher Reference:

LSIM Movie - XLSI 50 "The Dead Bird?

Activity Charting:

E.T. NAME: E-53

DECOMPOSITION

CONTAINER "A" (Animal)	CONTAINER “B” (NO Animal)
Date soil placed in container	Date soil placed in container
Date dead animal placed in container	(Place this container along side "A", water the same as container "A".)
(Place in protected area and expose to sunlight water periodically)	During the period of decomposition of container "A", was there any growth or change in container "B"?
Date container checked for degree of decomposition	Record:
Describe appearance	
Date animal decomposed, but for skeleton	
Date seed planted in container "A" (Same plant seed in both)	Date seed planted in container "B" (Same plant seed in both)
Type of plant seed	Type of plant seed
Date plant seed sprouted	Date plant seed sprouted
Draw picture of growth after two weeks:	Draw picture of growth after two weeks:
Describe plant growth in detail after four weeks:	Describe plant growth in detail after four weeks:

What is the reason for differences in plant growth between the two containers? Explain on the other side.