



Sun Munchers

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Activity Name: Sun Munchers

Ages: 6-8

Activity Level: Low

Length of time: 30 to 40 min

Number of Participants: 10-15

Concept: This activity is a great way to demonstrate to younger children how the sun's energy decreases as one moves up the food chain. It compliments the Energy Pyramids activity also described. It also demonstrates how we are all dependent on the sun's energy for our own survival.

Materials Required: A Sun picture or made banner, plant and animal pictures and enough paper plates coloured in three segments and each segment labeled - sun munchers, plant munchers, animal munchers for the group. Three lengths of yellow rope of different thicknesses.

Introduction: For this activity you will need four volunteers to help demonstrate the way energy flows through the food chain. One person will be the sun (hold the banner/sun picture); someone else will be a sun muncher (represents photosynthesis) (hold the picture of a plant); another person will be a plant muncher (hold a picture of a rabbit or squirrel) and the last will be an animal muncher (hold a picture of an owl or hawk). Using the yellow ropes, which represent the sun's energy, give the thickest to the sun muncher, the next thickest to the plant muncher and the thinnest to the animal muncher. The decreasing diameters represent the decrease in sun's energy as you go up the food chain while allowing the participants to see how the sun's energy connects us to all living things.

Methods: When the demonstration is over, hand out the segmented and labeled paper plates to paired off participants. Then ask them to search for and collect (non-living) evidence of sun munchers, plant munchers and animal munchers in nature. For example, a sun muncher could be a piece of leaf, a chewed leaf could be a plant muncher and a bird feather as an animal muncher. Allow about 20 minutes for the group to gather as many examples as possible and sort them in the segments of their plates. When done gather and share what they have found. Once completed have them put the evidence back into the forest near where they were found.

Tips for Teachers: This activity ideally should be done in a forested setting, but can be equally well done in more modified environments such as school grounds or gardens

and public parks. The movement of the sun's energy is happening in all environments whether wild or domesticated.

Guide your learners through deciding what category of muncher they have found. Try not to give them the answer, but instead remind them of the demonstration.

Background facts and information: One key factor that can be identified in the introduction of this activity is that green plants are the only organism on the Earth that can capture the sun's incoming energy and bind it so that it can be made available to all other organisms through food chains or food webs.

Literature Cited: Based on the work of the Institute for Earth Education, Steve Van Matre.