

(Part I-Garden Investigation)

EALR/Standard:

4-5SYS A-D: Systems, subsystems, inputs, outputs

Activity:

System, subsystem, inputs, and outputs brainstorming session in the garden to prepare for a longer investigation project.

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Goals:

Use the garden ecosystem to identify and understand natural systems and their subsystems. Discuss the inputs and outputs of each subsystem and their importance to the function of the whole.

Brief description:

Discuss how subsystems make up systems, and how systems consist of inputs and outputs. Use the garden to stimulate students' thinking.

Materials:

Paper for each student to write down observations
Magnifying glasses, hand trowels to explore garden

Procedure:

This activity should follow a classroom lesson on how subsystems comprise systems, and how systems and subsystems can be broken down into inputs and outputs.

With this understanding, students should spread out in the garden to observe and come up with ideas about the subsystems that comprise the garden system. Students should take notes on their observations outside.

In the classroom, make a chart to consolidate the observations made—eg.

<u>Subsystem</u>	<u>Inputs</u>	<u>Outputs</u>
Decomposition	dead leaves worms fungi	soil nutrients

New vocabulary:

Subsystem input output