



4-H

WASHINGTON STATE UNIVERSITY
EXTENSION

Eco-BOTS

Our Eco-Bot Challenge Kit will help produce an interest in engineering and environmental conscientiousness. This kit also serves to help students recognize what robots can do, employ the engineering design process, and develop problem solving skills. This activity was 4-H's National Science Experiment in 2012. The kit involves three consecutive activities, listed below.

Age Level: 8+; 3rd-6th grades

Time: 2 hours

Applications: Environmental Engineering; Ecology; Design; Engineering Process

County Available: King, Pierce, Snohomish, Thurston

Build Your Bot

- Assemble an Eco-bot, discover how it functions and its capabilities.

The Goal is Control

- Design a set of control surfaces to program the Eco-Bot to perform a simulated environmental cleanup project.

Make a Clean Sweep

- Measure the effectiveness of the control surface by recording how much of the spill is "swept up" by the Eco-Bot.



Kit Contents:

- Toothbrush heads
- Motors
- Batteries
- Straws
- Scissors
- Pliers
- Scotch Tape and Mounting Tape
- "Oil Spill" Maps
- Rice for clean-up
- Youth Guides



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Pierce County

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