5th grade Ecosystems Investigation 2, Part 2: Responding to Moisture

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Big Idea:

Certain organisms require different levels of moisture in their environments.

Hook:

Would you find more bugs in a swamp or a desert? How could we solve this?

(students group up to plan and share possible solutions)

Necessary Prior Knowledge:

- Students need to recall from personal experience where Isopods and beetles are found.

- Students need to recall what is all included in an organism’s environment.

Suggested Adaptations/Improvements:

\*\* - Have higher level students make trays ahead of time, or purchase your own type of container and line it with foil, so bugs can’t escape.

* Feel out class to see “bug limitations,” possibly designate certain students to handle bugs.
* Dry soil ahead of time

Extension:

- Have students work on dialogue punctuation in a story using the beetles and -isopods talking about their experience in their environments.

Timing:

Pre-Day 1 – set up runways and soil

Day 1- Hook, discuss solutions, set-up notebook and set-up soil for activity.

Day 2- (AM) saturate soils according to directions, drop in bugs and record observations of the first 15 minutes of activity.

Day 2 – (PM) Record 2nd observation, group discussion, complete notebook and exit pass (what is the preferred environment of isopods & beetles?)

Day 3: Word Bank, discuss exit passes from day 2, discuss hook from day 1, add any questions to class list, read story “The Darkling Beetle” in reading class.

Other Materials:

Science Notebooks

Soil

Isopods

Beetles

Water

Runways

QIP & SIP: definitely are present, especially if teachers hold back from giving background knowledge on the type of bugs.