

Learning Outdoors

Lesson Title: Wiggly Worms	Quick Facts:
Big Idea: Learn about and observe earthworms.	
Anchor Story: Diary of a Worm by Doreen Cronin ~or~ Under on Rock: Bugs, Slugs and other Ughs... by Anthony Fredericks	
<p>Materials & Prep:</p> <ul style="list-style-type: none"> • story book • trowels or large spoons and a couple pails • damp paper towel • earthworms (have 4-5 in case some groups do not find one) • pencils and clipboards • science journals 	<ul style="list-style-type: none"> • "earthworm" is a general term for any species of terrestrial annelid worm • body is made up of rings called <u>segments</u> • each segment is surrounded by muscles which help them to move • tiny bristles give it traction as it stretches & thickens • no obvious head, but can tell by which direction it is going • no eyes but sense light, will burrow when there is light • don't breathe, absorb oxygen through moist skin • if they dry out they will die • break down dead material and fertilize soil- do this by eating soil and pooping it out (<u>castings</u>) • poop/casting is full of nutrients • loosen soil to help water and oxygen to reach plant roots (<u>aerate</u>) the soil • food for birds and other small animals
<p>Outdoors (procedures)</p> <ol style="list-style-type: none"> (1) Review forest safety rules before heading to outdoor class (2) Read <i>Diary of a Worm</i> and ask and discuss where do you think we be a good place to dig for worms? (3) In partners or small groups, have the children go digging to find earthworms and put them in the pails (4) Once all groups have found a worm; put the worm on a damp paper towel and have the children look closely to see what they can learn *remind children we look with our eyes, if you must touch be very gentle and not hurt the worm (5) Allow children time to observe *may need to guide observation with questions; How does it move? What colour is it? What does it look and feel like? What do worms do? (introduce vocabulary: segment, head, tail, castings, aerate) (6) Have children sketch worms in journal before returning them to their homes (7) Before heading back to class have students share 1 new fact they learned about worms 	
<p>Extensions:</p> <p><input checked="" type="checkbox"/> Art <input checked="" type="checkbox"/> Math <input type="checkbox"/> Music <input type="checkbox"/> Home Connection</p> <ul style="list-style-type: none"> • Art- painting with plastic worms and natural soil paint • Math-counting & measuring by dissecting a gummy worm 	<p>Assessment:</p> <ul style="list-style-type: none"> • observations • discussion • work produced

Lesson plan adapted from "Growing Up Wild: Exploring Nature with Young Children" 2012