



# Above and Below Garden Soil

Standard Connection:

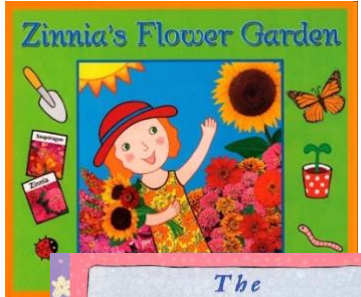
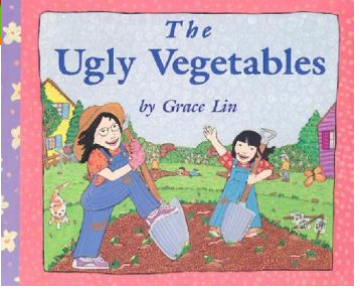
- ELA.SL.PK4.1a
- ELA.W.PK4.5
- M.MD.PK4.1
- M.G.PK4.2
- S.LS.PK4.2a
- S.LS.PK4.4c
- SS.OW.PK4.5
- PD.FM.PK4.3
- PD.SHS.PK4.6
- VA.CR1a.2.PK
- VA.CN10.1.PK

## Enduring Understanding(s):

- Living things are part of interdependent systems.

## Essential Question(s):

- What do systems need in order to function successfully?

Materials	Vocabulary	Books
<ul style="list-style-type: none"> <li>• <i>Zinnia's Flower Garden</i></li> <li>• <i>The Ugly Vegetables</i></li> <li>• variety of paper</li> <li>• Beautiful Stuff</li> <li>• paint</li> <li>• paintbrushes</li> <li>• writing and drawing utensils</li> <li>• images of above and below garden soil (see Resources)</li> <li>• adhesives</li> </ul>	<p><b>above:</b> in a higher place</p> <p><b>below:</b> in a lower place</p> <p><b>garden:</b> an area where fruits, flowers, or vegetables are grown</p> <p><b>insect:</b> a small animal with 6 legs and two wings</p> <p><b>roots:</b> the underground part of a plant</p> <p><b>seed:</b> used to make a new plant</p> <p><b>sign:</b> a written label or direction</p> <p><b>soil:</b> dirt for growing plants</p> <p><b>stem:</b> the supportive part of a plant</p>	 

Intro to Centers	
<b>Preparation:</b> <i>Set up materials.</i>	
“In <i>Zinnia's Flower Garden</i> and in <i>The Ugly Vegetables</i> , Zinnia, the girl, and her mother planted <b>gardens</b> . What do you notice?”	<b>Show illustrations.</b> Children respond.
“Here are images of <b>gardens</b> . What do you notice?”	<b>Show images.</b> Children respond.
“The <b>gardens</b> are built on <b>soil</b> . What do you notice?”	<b>Trace your finger across, above, and below the soil line.</b> Children respond.
“The <b>stems</b> , leaves, <b>garden signs</b> , and animals are <b>above</b> the <b>soil</b> . <b>Seeds, roots, insects</b> , and animals are <b>below</b> the soil.”	<b>Point above and below the soil line.</b>
“Today in Creative Arts, you can create a <b>garden</b> with these materials. Show <b>above</b> and <b>below</b> the <b>garden soil</b> .”	<b>Show materials.</b> <b>Draw a horizontal line for soil. Model.</b>

## **During Centers:**

Encourage children to collaborate, e.g., one child depicts above the soil, another child depicts below the soil. Compare and contrast children's gardens to illustrations/images/each other's designs. Encourage children to create labels for/write descriptions of above/below their garden soil. Compare and contrast underground insects to nocturnal animals. Encourage children to create maps of above and below garden soil.

## **Guiding Questions During Centers:**

- How are underground insects/animals similar to or different from nocturnal animals?
- How are above-ground insects/ animals similar to or different from underground insects/animals?
- How is a map of above/below your garden soil helpful?
- How did you use Beautiful Stuff to create above and below your garden?

## **Thinking and Feedback:**

Invite children to share their processes. Encourage children to describe any challenges they might have encountered.

## **Documentation:**

Collect samples of the children's work as well as photographs of their process; use the documentation to launch a discussion during Thinking and Feedback.

## **Provocation:**

Encourage children to create a collaborative collage of above and below garden soil. Plant lima beans from *Planting Seeds* in clear containers for children to observe plant growth above and below the soil.

Encourage children to make other above/underground connections- trains/subways, bridges/ tunnels, etc.

## **Differentiation/Accommodation:**

For Intro to Centers, children with limited verbal skills can use a pre-programmed voice output device to answer questions about the story. (Keep in mind these will likely be closed-ended questions, as those are easiest to program into devices.) This can also be used to help students answer Guiding Questions. During Centers, provide a variety of materials to meet the children's fine motor and sensory needs. Strategically partner children together for collaboration.