

K-ESS2-2. Construct an argument supported by evidence for how plants and animals (including humans) can change the environment to meet their needs.

<p><u>PE</u> Construct an argument supported by evidence for how plants and animals (including humans) can change the environment to meet their needs. [Clarification Statement: Examples of plants and animals changing their environment could include a squirrel digs in the ground to hide its food and tree roots can break concrete.]</p>	<p><u>DCI</u></p> <ul style="list-style-type: none"> Plants and animals can change their environment. Things that people do to live comfortably can affect the world around them. But they can make choices that reduce their impacts on the land, water, air, and other living things. (secondary) 	<p><u>CCC</u></p> <ul style="list-style-type: none"> Systems and System Models – Systems in the natural and designed world have parts that work together. 	<p><u>Practices</u> Engaging in Argument from Evidence – <i>Engaging in argument from evidence in K-2 builds on prior experiences and progresses to comparing ideas and representations about the natural and designed world(s).</i> Construct an argument with evidence to support a claim.</p>
<p><u>Activity</u> Small Group: Develop a story to answer your group's questions using props. (See question cards.)</p>	<p><u>Question</u> What would you do? What would animals do in the same situation?</p>	<p><u>Objectives / Next Steps</u></p> <ul style="list-style-type: none"> Humans, animals, and plants respond to changes in their environment, sometimes by changing the environment itself. Animals (including humans) often have more freedom to change their environment than plants. <p><i>How do these independent choices affect the larger ecosystem?</i></p>	<p><u>Notes</u> It may be beneficial to complete the first exercise as a class – discuss what humans, animals, and plants can do when they are cold. In the formal program, we provide 3-d printed props of humans, squirrels, trees, and flowers as manipulatives to keep presenters on track.</p>
<p>Whole class: As groups present their stories to the class, ask the class to consider the consequences of individual organisms' responses. For example, when humans build a house, there are no longer as many places for squirrels to make their home. (Optional) Ask students to consider consequences to both other creatures and the environment as a whole. For example, when humans turn up the heat, they must burn more fuel and create more pollution.</p>	<p>Do any of these actions have other consequences?</p>	<ul style="list-style-type: none"> When organisms change their environment, they also change the environment for other creatures in their community. (Optional) When organisms make some changes to their environment, those changes can affect the whole globe. (Optional) As humans, we can make choices which reduce deforestation, water pollution, air pollution, and climate change. 	