

WEEK 3 Day 1

**STEM Investigation 3:
Human Behaviors**

Children explore how structures of the human body impact how they move in various environments within their habitats. Children consider which structures they use to stand, walk, or draw, etc. Children record data about how human structures affect movement.

Big Ideas	Like humans, animals are part of interdependent communities that are affected by, and adapt to, the environment that surrounds them. Through shared or independent research, people gather, organize, and analyze information about the world to think critically and gain understanding.
Guiding Questions	What do you want to learn more about animals and their habitats? How and where can you find this information?
Vocabulary	structure habitat move
Materials and Preparation	<ul style="list-style-type: none"> ● 1-2 body tracings, from STEM Investigation 1 ● human structure picture cards Prepare a set of human structure cards, using photos from children in the class (if possible). Each card should include the word and a corresponding image. Make the following: head, neck, arm, elbow, hand, fingers, knee, leg ● a container to store the human structure picture cards (bag, or box, or basket) ● writing and drawing tools ● clipboards <p style="text-align: center;">On the chart paper, write the focus question, <i>What do you notice about how you use your own body structures to move?</i></p> <p>Children will generate any number of authentic questions as they work.</p>

	<p>Keep a large piece of chart paper on the wall near the STEM Center to record and "bank" any spontaneous questions you hear. During the Sharing our Research meeting, review these child-generated questions.</p>
<p>Intro to Centers</p>	<p><i>Remember we drew our bodies and labeled our different structures?</i> Make connections to Investigation 1. Refer to the scientific illustrations.</p> <p><i>Today, we are going to talk more about the human body structures. We have a new focus question: What do you notice about how you use your own body structures to move?</i> Point to and read the focus question.</p> <p>What are some important words in the focus question that we need to understand as scientists in order to answer it? Circle the words 'notice,' 'structures,' and 'move.' Remind children about their own structures by showing one of the human body illustrations created in Investigation 1.</p> <p><i>Point to your _____ (elbow, knee, wrist, hips, etc.).</i> Point to some of the structures on the illustration and ask children to point to these same structures on their own bodies.</p> <p><i>What structures do you use when you stand up?</i> Invite children to think like scientists and investigate how they move their own structures in certain ways.</p> <p>Invite children to stand up. Explain that scientists observe and investigate to figure things out.</p> <p>Model the activity for children. Choose a structure card from the container. Think of one way you use this structure inside the classroom and one way you use this structure outside the classroom. Next, draw a picture of the inside movement on one side of a paper and an outdoor movement (using the same structure) on the other side of the paper.</p>
<p>During Centers</p>	<p>Children will investigate how their bodies move inside the classroom and outside. Children will select various human structure cards and document one way the structure is used inside the classroom and one way the structure is used outside the classroom.</p> <p>When possible, practice different movements with children inside the classroom and help children to note the structures used.</p> <p>If children are having difficulty with drawing pictures, you might allow them</p>

	to photograph each other or themselves.
Facilitation	<ul style="list-style-type: none"> ● Think about what you do in the classroom (e.g., walk, write, sit, stand, eat, zip). What other ways do you use your structures to move? ● How do you move when you are in your outdoor habitat (e.g. the playground)? Do you run outside where there is more space than in the classroom? What structures do you use to run? ● Do you like to climb? What do you climb? What structures of your body do you use when climbing? ● Shake hands with your neighbor. What structures did you use? Now, try to shake hands without bending your elbows. What do you notice?
Sharing Our Research	<p><i>What did you notice about how we use our structures to move?</i></p> <p>Children turn and talk to a classmate about something he/she noticed. As children talk about how they utilize different structures, chart these movements under the structure labels. Have children’s drawings available so they can compare and contrast how they use the same structures to move inside and outside.</p> <p>Play charades. Model a movement without speaking. Call on a child to: 1) make a guess about what you are doing based on observing the behaviors and 2) name one structure that was used. For example, act out picking up food with a fork, putting the food in your mouth, chewing the food, and then swallowing the food.</p> <p>Children can take turns modeling an action. Classmates can be scientists; they can observe the behavior and name the structures used in the action.</p>
Standards	<p>K-ESS3-1 Use a model to represent the relationship between the needs of different plants or animals (including humans) and the places they live. Further explanation: Examples of relationships could include that deer eat buds and leaves and therefore usually live in forested areas and that grasses need sunlight so they often grow in meadows. Plants, animals, and their surroundings make up a system. Examples could include coastal tide pools, humans in Maine living in insulated buildings for protection during cold months, or uninsulated structures during warm months (e.g. camping in a tent). Examples of animals that migrate include monarch butterflies, ducks, Canada geese, etc. Developing and Using Models, Natural Resources, Systems and System Models</p>