

Unit 2: Animals and Habitats

WEEK 1 Day 1

**STEM Investigation 1:
Structures of the Human Body**

Children make observations of the structures of their own bodies and of their classmates' bodies. Children record data by creating scientific illustrations of the structures of their bodies. The class develops the understanding that human beings have particular structures such as eyes, mouths, arms, and legs.

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 function parts characteristics
Materials and Preparation	<ul style="list-style-type: none">● large sheets of butcher paper for tracing bodies Prepare child-size sheets of butcher paper for each child so children can trace their classmates.● chart paper On the chart paper, write the focus question, <i>What do you notice about the human body?</i>● markers● mirrors (optional)● photograph of human body (optional) <p>Consider where tracing on the floor could happen. It can be any open</p>

	<p>space, such as the floor of the Art Studio or in the hallway outside the classroom.</p> <p>Children will generate any number of authentic questions as they work. 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>As scientists this week, you will investigate the focus question, What do you notice about the human body?</i></p> <p>Point to the focus question and read it aloud.</p> <p><i>What are some important words in the focus question that we need to understand as scientists in order to answer it?</i></p> <p>Provide time for children’s responses. Circle the words ‘notice,’ ‘human,’ and ‘body.’ Discuss these words.</p> <p><i>What is the fancy word scientists use for noticing something?</i></p> <p>Discuss and write the word ‘observe’ about the word ‘notice’ on the chart.</p> <p><i>What might we do as scientists to answer this focus question? Turn and tell a partner.</i></p> <p>After the partner conversations, harvest a few responses.</p> <p><i>Scientists tell each other about what they discover. The information they record is called data. How do you think we can share our data about the structures, or parts, of our bodies?</i></p> <p><i>As scientists in the STEM Center this week, we will make careful observations of your bodies and your classmates’ bodies. You will record what you find by tracing your classmates body on a large piece of paper.</i></p> <p>Model the activity. Have one child lie down on a piece of butcher paper. Trace the child's body. After, have the child stand up. Model how to carefully look at the child, and then draw/label a body structure on the illustration. For instance, look at the child’s eyes, draw the child’s eyes, then label.</p>
<p>During Centers</p>	<p>Children make observations of their bodies and their classmates' bodies. Children draw scientific illustrations on butcher paper by tracing each other’s bodies. Then children add on features and labels. For children who may benefit from extra visual support, provide mirrors and/or picture word cards with different human body parts.</p>

<p>Facilitation</p>	<ul style="list-style-type: none"> ● What parts and structures of your friend's body do you notice? ● What does your friend look like? ● What are some things your friend can do with his/her body? ● If your friend didn't have _____(body part) what do you think would happen? ● Do all the children in the classroom have the same parts? How do you know? ● Do you have any of the same parts as your friend? If you do, do you use it (them) in the same ways that your friend does?
<p>Sharing Our Research</p>	<p><i>What do you notice about the human body?</i></p> <p>Revisit the focus question.</p> <p style="text-align: center;"><i>While looking at the data generated, what did we find out about your bodies and your friends' bodies?</i></p> <p>Be sure to keep children focused on the observable features or structures of the body. For instance, if children say, "my friend was happy," ask, "how do you know?"</p> <p>As children describe the structures of the human body, add these features to your scientific illustration (the illustration you began during the Intro to Centers) and label each feature. Remind children that scientists draw what they see, not what they <i>think</i> they see.</p> <p>Point out that while all children have mostly the same structures (e.g., hair), not every structure looks the same (e.g., people have different hair color).</p>
<p>Standards</p>	<p>K-LS1-1 Use observations to describe patterns of what plants and animals (including humans) need to survive. Further explanation: Examples of patterns could include that animals need to take in food but plants do not, the different kinds of food needed by different types of animals, the requirement of plants to have light, and that all living things need water. Examples could include the pattern a bear makes when preparing to hibernate for winter, the seasonal patterns of trees losing and/or keeping their leaves. Analyzing and Interpreting Data, Organization for Matter and Energy Flow in Organisms, Patterns</p>