

The KU Natural History Museum's *Microbes on the Move* webpage was created with Adobe Spark. This platform does not support alt text (alternative text). Therefore, screen-reading tools cannot describe images on the page. In lieu of alt text on the webpage, image and video descriptions are outlined below. The outline follows the order of the website as you scroll from the top to the bottom.

Note: although graphics on the webpage are clickable to make them appear bigger, all descriptions for graphics are of the graphics as they appear on the webpage.

- Loading Page
  - Image description: A small logo for the KU Natural History Museum, colored white, is located in the center of the webpage, above a bar that communicates the loading status of the webpage. Below this bar is white text in all caps that reads 'loading.' The logo contains two circles: a small inner circle enclosed in a large circle. Text reads 'KU Natural History Museum' in all caps in the top right of the logo between the small inner and large outer circles. A cartoon depiction of a mosasaur fossil skeleton is mostly enclosed in the small inner circle, although its back flipper and tail bleeds outside the small inner circle into the space between the small inner and large outer circles and space outside the large outer circle in the bottom left of the logo.

All items described in this description are on a green background.

- Webpage
  - Title
    - Image description: A small logo for the KU Natural History Museum, colored white, is located in the top left corner of the webpage, above the title. The logo contains two circles: a small inner circle enclosed in a large circle. Text reads 'KU Natural History Museum' in all caps in the top right of the logo between the small inner and large outer circles. A cartoon depiction of a mosasaur fossil skeleton is mostly enclosed in the small inner circle, although its back flipper and tail bleeds outside the small inner circle into the space between the small inner and large outer circles and space outside the large outer circle in the bottom left of the logo.

Centered on the web page is the logo for the KU Natural History Museum's *Microbes on the Move* program. The logo is circular. At the top of the logo in curved orange text is the program's name 'Microbes on the Move.' The text is centered between two orange circles. One circle is at the start of the title. The other circle is at the end of the title. Underneath the text are cartoon drawings of microbes. They are colored using orange, blue, and green. These drawings fill in the space below the title and create the circle shape of the logo.

Superimposed on the logo is white, bold text that reads 'KU Natural History Museum.' 'KU' is in all caps.

All items described in this description are on a green background.

○ Introduction

- Video description: The next section of the webpage invites participants to learn about the KU Natural History Museum's mobile museum. Text reads 'Explore our mobile museum exhibits and learn about microbes.' A stylized yellow line with artistic elements is located below the text. Then, an embedded video can be clicked on and viewed by participants. In the video, Eleanor Gardner, the KU Natural History Museum's Outreach and Engagement Coordinator, narrates the video that explains the museum's mobile museum and Microbes on the Move programs. The video description below the embedded video reads 'Watch a two minute video tour of our mobile museum exhibits. Scroll down to explore these displays. A magnifying glass highlights a microbial connection you can learn more about by continuing down the page to get moving and model microbes!' A stylized yellow line with artistic elements is located below the text.

All items described in this description are on a green background.

○ Exhibits

- Image description: Sixteen close-up images of mobile museum exhibits highlight the many specimens in the mobile museum. Scattered throughout the images are eleven orange cartoon magnifying glasses. These magnifying glasses are superimposed on specimens that are discussed in the next part of the webpage.

All items described in this description are on a green background.

- Image description: A clickable link is enclosed in a yellow oval with black text in the center that reads 'About Microbes.' If the link is clicked, a new webpage opens containing a graphic. This graphic defines microbes with text that reads 'Microbes typically refer to single-celled living things from diverse biological groups. Many microbes, however, grow in groups or are made up of more than one cell.' The graphic also illustrates different microbes and their characteristics, primarily their size at x140 magnification. Cartoon microbes representing archaea, bacteria, fungi, algae, and protists are drawn in black circles, which represent their size at x140 magnification. Images to the left of the cartoons in the black circles show these microbes at a scale for participants to view specific characteristics:
  - Archaea: Look for very small dots and squiggles
  - Bacteria: Look for very small dots and squiggles
  - Fungi: Look for long, thin strands

- Algae: Look for green stuff
- Protists: Look for movement

The graphic also contains pronunciations and definitions for each microbe.

- Archaea (ar-key-ah): free-living or grow in groups; found everywhere, extreme environments
- Bacteria (back-tier-e-ah): free-living or grow in groups; found everywhere
- Fungi (fun-guy): form thread-like hyphae or round colonies; found everywhere
- Algae (al-ghee): free-living or grow in colonies; found in water and on other living things
- Protists (pro-tists): free-living or a parasite found in water and soil

All items described in this graphic description are on a green background. All text in the graphic is white.

At the bottom right of the page are three clickable links. The first link has a heart and is followed by the text 'Appreciate.' The second link is the Twitter logo followed by the text 'Tweet.' The last link is the Facebook logo followed by the text 'Share.' Text of each link is black on a white background.

At the bottom of the page are two clickable links to webpages for Adobe's General Terms of Use ('Terms of service') and Adobe's Privacy Center ('Privacy policy') and a clickable link to a pop-up to report abuse on the webpage ('Report abuse'). The text for the links is white on a black background.

- Museum Specimens and Information
  - Sperm whale

- Image description: In a green panel are two items. The first item is on the left side of the panel. This is an image of cartoon microbes, specifically three white archaea, enclosed in a yellow circle. Above the circle is white text that reads 'x400-1000,' which states the magnification of these archaea. Below the circle is white text that reads 'Archaea.' Below this text is smaller text that reads 'ar-key-ah' enclosed in parenthesis. This states how to pronounce the word archaea.

The second item is on the right side of the panel. This is white text that provides clues about microbes related to a museum specimen from the Mobile Museum. The text is written as a poem

with the title 'Who am I?' in bold. The text at the end of the poem is italicized.

### **Who am I?**

I fall from waters above and land on the ocean floor.

Where I become a meal for hagfish, sharks, and many more!

Archaea in sand wait for a treat - to decompose bits of me that others sloppily eat.

*Hint: one of the biggest mammals.*

- Image description: A scientific illustration of a sperm whale. The sperm whale is realistic and a gray-blue color. The head faces the left side of the webpage, and the tail-end faces the right side of the webpage. It is on a green background.
- Image description: A green panel on the right side of the webpage is superimposed on the illustration of the sperm whale. White, bold text reads 'Sperm Whale' at the top of the panel. Underneath the text is a yellow line with artistic elements. Below the line is white text that reads '*Physeter macrocephalus*, tooth, cast.' *Physeter macrocephalus* is italicized, as it is the scientific name of sperm whale, and 'tooth' is in bold text. Below this text is an image of a replica sperm whale tooth that is off-white in color. A scale bar is located below the textured root of the tooth and includes white text that describes the measurement of the end of the root. This text reads '1 inch (25.4mm),' so the scale bar represents one inch, or 25.4 millimeters. Below the tooth is a graphic that provides information about *Methanogenium*, a group of archaea, and a prompt to perform a specific action. The text is enclosed in a black circle that mimics the lens of a magnifying glass. White, bold text at the top of the graphic reads 'Mimic A *Methanogenium*.' The word 'Mimic' is curved, and the word '*Methanogenium*' is italicized because it is a scientific name. Below this text is yellow text that reads 'Form a round, or coccoid, shape with your body, it doesn't have to be perfect!' A color image of a whale fall at the bottom of the ocean is in the center of the circle, below the yellow text. Below the image is white text that reads '*Methanogenium*: group of coccoid-shaped archaea that break down whale bits on the ocean floor.' The word '*Methanogenium*' is italicized because it is a scientific name.

At the bottom of the panel is a clickable link. The link is enclosed in a yellow oval with black text in the center that reads 'Show Me.' If the link is clicked, a new webpage opens containing a graphic. This graphic shows KU Natural History Museum student employee, Joy, mimicking the shape of a *Methanogenium*. The title of the graphic reads 'Mimic a *Methanogenium*' in black and blue text. Only the word '*Methanogenium*' is italicized because it is a scientific name. Below the title is a yellow line. Then, below the line, is an image of Joy, forming a circle with her hands. The title, line, and image of Joy are on the left side of the graphic on a white background. On the right side of the graphic is a close-up image of *Methanogenium* from a microscope. Below the image is text that reads 'This group of archaea have a round, or coccoid, shape. Joy recreates this shape using her hands.' The image is black and white and the text is black. Both are on a light blue background.

At the bottom right of the page are three clickable links. The first link has a heart and is followed by the text 'Appreciate.' The second link is the Twitter logo followed by the text 'Tweet.' The last link is the Facebook logo followed by the text 'Share.' Text of each link is black on a white background.

At the bottom of the page are two clickable links to webpages for Adobe's General Terms of Use ('Terms of service') and Adobe's Privacy Center ('Privacy policy') and a clickable link to a pop-up to report abuse on the webpage ('Report abuse'). The text for the links is white on a black background.

- Bison

- Image description: In a green panel are two items. The first item is on the left side of the panel. This is an image of cartoon microbes, specifically three white archaea, enclosed in a yellow circle. Above the circle is white text that reads 'x400-1000,' which states the magnification of these archaea. Below the circle is white text that reads 'Archaea.' Below this text is smaller text that reads 'ar-key-ah' enclosed in parenthesis. This states how to pronounce the word archaea.

The second item is on the right side of the panel. This is white text that provides clues about microbes related to a museum specimen from the Mobile Museum. The text is written as a poem with the title 'Who is it?' in bold. The text at the end of the poem is italicized.

## Who is it?

I live without oxygen and make gas using carbon dioxide.

You can find me with this animal, I'll be on the inside.

In their guts I make methane which needs to get outside.

*Hint: Kansas state symbol.*

- Image description: A scientific illustration of a bison. The bison is realistic and, predominantly, the color brown. The head faces the left side of the webpage, and the tail faces the right side of the webpage. It is on a green background.
  - Image description: A green panel on the right side of the webpage is superimposed on the illustration of the bison. White, bold text reads 'Bison' at the top of the panel. Underneath the text is a yellow line with artistic elements. Below the line is white text that reads '*Bison bison*, horn with sheath.' *Bison bison* is italicized, as it is the scientific name of bison. Below this text is an image of a white bison horn with a black sheath. A scale bar is located below these images and includes white text that describes the size of the horn and sheath. This text reads '1 inch (25.4mm),' so the scale bar represents one inch, or 25.4 millimeters. Below the image of the horn and sheath is a graphic that provides information about *Methanoculleus*, a group of archaea, and a prompt to perform a specific action. The text is enclosed in a black circle that mimics the lens of a magnifying glass. White, bold text at the top of the graphic reads 'Belch Like A Bison,' and the word 'Belch' is curved. Below this text is yellow text that reads 'You know what to do.' Two black and white images of *Methanoculleus* are in the center of the circle, below the yellow text. Below the images is white text that reads '*Methanoculleus*: methane-producing archaean in bison guts that help digestion. Most of our microbial methane comes out in farts.' The word '*Methanoculleus*' is italicized because it is a scientific name.
- Coral
    - Image description: In a green panel are two items. The first item is on the left side of the panel. This is an image of cartoon algae, specifically three white algae each containing a small lime green component within the illustration, enclosed in a yellow circle. Above the circle is white text that reads 'x20-400,' which states the magnification of these algae. Below the circle is white text that reads 'Algae.' Below this text is smaller text that reads 'al-

ghee' enclosed in parenthesis. This states how to pronounce the word algae.

The second item is on the right side of the panel. This is white text that provides clues about microbes related to a museum specimen from the Mobile Museum. The text is written as a poem with the title 'Who am I?' in bold. The text at the end of the poem is italicized.

### **Who am I?**

Armored algae make oxygen that they then share with me.

They live inside my hard skeleton, protected they will be.

A deal 200 million years old, is something you should see.

*Hint: I make up tropical reefs.*

- Image description: A scientific illustration of coral. The coral is realistic and the color is blue. It is drawn in a way which makes it appear that the coral is on tan sand. It is on a green background.
- Image description: A green panel on the right side of the webpage is superimposed on the illustration of the coral. White, bold text reads 'Coral' at the top of the panel. Underneath the text is a yellow line with artistic elements. Below the line is white text that reads '*Halysites catenularia*, Ordovician (488-434 mya).' *Halysites catenularia* is italicized, as it is the scientific name of a fossil coral. Below this text is an image of this light brown fossil coral. A scale bar is located below this image and includes white text that describes the size of the fossil coral. This text reads '1 inch (25.4mm),' so the scale bar represents one inch, or 25.4 millimeters. Below the image of the fossil coral is a graphic that provides information about *Symbiodinium*, an algae, and a prompt to perform a specific action. The text is enclosed in a black circle that mimics the lens of a magnifying glass. White, bold text at the top of the graphic reads 'Dance Like a Dinoflagellate (die-no-fla-gel-ette).' The word 'Dance' is curved. The text in the parenthesis states how to pronounce the word dinoflagellate. Below this text is yellow text that reads 'Hold your right arm up and wave it while moving down; wrap your left arm around your waist, then flap your hand while rotating left.' A black and white image of *Symbiodinium* is in the center of the circle, below the yellow text. Below the image is white text that reads '*Symbiodinium*: algae that live in coral. Individuals move using 2 tails (flagella) when

without a coral host.' The word '*Symbiodinium*' is italicized because it is a scientific name.

- Fossil Algae
  - Image description: In a green panel are two items. The first item is on the left side of the panel. This is an image of cartoon algae, specifically three white algae each containing a small lime green component within the illustration, enclosed in a yellow circle. Above the circle is white text that reads 'x20-400,' which states the magnification of these algae. Below the circle is white text that reads 'Algae.' Below this text is smaller text that reads 'al-gee' enclosed in parenthesis. This states how to pronounce the word algae.

The second item is on the right side of the panel. This is white text that provides clues about microbes related to a museum specimen from the Mobile Museum. The text is written as a poem with the title "Who am I?" in bold. The text at the end of the poem is italicized.

### **Who am I?**

This fossil shows us living together in colonies.

We made lots of oxygen; although we were not trees.

You would have seen us on the water moving with the breeze.

*Hint: you might mistake me for a fossil sponge.*

- Image description: A scientific illustration of algae. The algae are realistic and a light green color. It is on a green background.
- Image description: A green panel on the right side of the webpage is superimposed on the illustration of the algae. White, bold text reads 'Fossil Algae' at the top of the panel. Underneath the text is a yellow line with artistic elements. Below the line is white text that reads '*Somphospongia multiformis*, Pennsylvanian (323-299 mya).' *Somphospongia multiformis* is italicized, as it is the scientific name of a fossil algae. Below this text is an image of this textured, light brown-green fossil algae. The image contains two examples of the fossil algae. A scale bar is located below this image and includes white text that describes the size of the fossil algae. This text reads '1 inch (25.4mm),' so the scale bar represents one inch, or 25.4 millimeters. Below the image of the fossil algae is a graphic that provides information about *Spirogyra*,

algae, and a prompt to perform a specific action. The text is enclosed in a black circle that mimics the lens of a magnifying glass. White, bold text at the top of the graphic reads 'Connect Like a Colony.' The word 'Connect' is curved. Below this text is yellow text that reads 'Form a group with your neighbors.' A color image of *Spirogyra* is in the center of the circle, below the yellow text. Below the image is white text that reads '*Spirogyra*: algae that forms colonies and is found in Kansas waters.' The word '*Spirogyra*' is italicized because it is a scientific name.

▪ Mole Salamander

- Image description: In a green panel are two items. The first item is on the left side of the panel. This is an image of cartoon algae, specifically three white algae each containing a small lime green component within the illustration, enclosed in a yellow circle. Above the circle is white text that reads 'x20-400,' which states the magnification of these algae. Below the circle is white text that reads 'Algae.' Below this text is smaller text that reads 'al-gee' enclosed in parenthesis. This states how to pronounce the word algae.

The second item is on the right side of the panel. This is white text that provides clues about microbes related to a museum specimen from the Mobile Museum. The text is written as a poem with the title "Who am I?" in bold. The text at the end of the poem is italicized.

**Who am I?**

Algae can be found inside my cousin's eggs and in their embryos.

Giving babies oxygen and using their waste is how this setup goes.

To find me, look for my four legs, the front ones with just four toes.

*Hint: my name tells you that I burrow in the ground.*

- Image description: A scientific illustration of a mole salamander. The mole salamander is realistic and a gray-brown color. The tail is curved and faces the left side of the webpage, and the head faces the right side of the webpage. It is on a green background.
- Image description: A green panel on the right side of the webpage is superimposed on the illustration of the mole salamander.

White, bold text reads 'Mole Salamander' at the top of the panel. Underneath the text is a yellow line with artistic elements. Below the line is white text that reads '*Ambystoma* sp.' *Ambystoma* is italicized, as it is the scientific name for the mole salamander genus. Below this text is a color image of many mole salamanders in a jar. The mole salamanders in the jar are submerged in liquid. A scale bar is located below the jar and includes white text that describes the size of the jar. This text reads '1 inch (25.4mm),' so the scale bar represents one inch, or 25.4 millimeters. Below the jar is a graphic that provides information about *Oophila amblystomatis*, a species of algae, and a prompt to perform a specific action. The text is enclosed in a black circle that mimics the lens of a magnifying glass. White, bold text at the top of the graphic reads 'Swim Like a Salamander Algae.' The word 'Swim' is curved. Below this text is yellow text that reads 'Use your arms to do the breaststroke.' A color image of the algae in a salamander egg and a close-up of the algae is in the center of the circle, below the yellow text. Below the image is white text that reads '*Oophila amblystomatis*: algae that live in salamander eggs.' '*Oophila amblystomatis*' is italicized because it is a scientific name.

At the bottom of the panel is a clickable link. The link is enclosed in a yellow oval with black text in the center that reads 'Show Me.' If the link is clicked, a new webpage opens containing a graphic. This graphic shows KU Natural History Museum student employee, Mira, mimicking the movement of a *Oophila amblystomatis*. The title of the graphic reads 'Swim Like a Salamander Algae' in black text on a light blue background. Below the title is an image of Mira, with her left arm in front of her and her right arm behind her. She is mimicking a swimming motion. The title and image of Mira are on the left side of the graphic on a white background. On the right side of the graphic is a color image of several salamander eggs with algae living in them. Below the image is text that reads 'Algae can be found many places, including salamander eggs! Mira recreates the movement of this type of algae by doing a breaststroke.' The image is colored and the text is black. Both are on a light blue background.

At the bottom right of the page are three clickable links. The first link has a heart and is followed by the text 'Appreciate.' The second link is the Twitter logo followed by the text 'Tweet.' The last link is the Facebook logo followed by the text 'Share.' Text of each link is black on a white background.

At the bottom of the page are two clickable links to webpages for Adobe's General Terms of Use ('Terms of service') and Adobe's Privacy Center ('Privacy policy') and a clickable link to a pop-up to report abuse on the webpage ('Report abuse'). The text for the links is white on a black background.

- Pufferfish

- Image description: In a green panel are two items. The first item is on the left side of the panel. This is an image of cartoon bacteria, specifically three white bacteria, enclosed in a yellow circle. Above the circle is white text that reads 'x400-1000,' which states the magnification of these bacteria. Below the circle is white text that reads 'Bacteria.' Below this text is smaller text that reads 'back-tier-e-ah' enclosed in parenthesis. This states how to pronounce the word bacteria.

The second item is on the right side of the panel. This is white text that provides clues about microbes related to a museum specimen from the Mobile Museum. The text is written as a poem with the title "Who am I?" in bold. The text at the end of the poem is italicized.

**Who am I?**

I can quickly swallow water to inflate and form a ball.

My poison spines then stick out as a warning to all.

The toxins I use are made by bacteria which are very, very small.

*Hint: another common name for me is balloonfish.*

- Image description: A scientific illustration of a pufferfish, inflated with poison spines sticking out from its body. The pufferfish is realistic and its colors include a light brown top and off-white bottom with dark brown spots on all parts of its body. The spines are white. Its face is directed towards the left side of the webpage. It is on a green background.
- Image description: A green panel on the right side of the webpage is superimposed on the illustration of the pufferfish. White, bold text reads 'Pufferfish' at the top of the panel. Underneath the text is a yellow line with artistic elements. Below the line is white text that reads 'Tetraodontidae.' Below this text is a color image of a pufferfish, which is not inflated, in a jar. The pufferfish in the jar is submerged in liquid. A scale bar is located below the jar and

includes white text that describes the size of the jar. This text reads '1 inch (25.4mm),' so the scale bar represents one inch, or 25.4 millimeters. Below the jar is a graphic that provides information about *Vibrio alginolyticus*, a species of bacteria, and a prompt to perform a specific action. The text is enclosed in a black circle that mimics the lens of a magnifying glass. White, bold text at the top of the graphic reads 'Puff Up Like a Pufferfish.' The words 'Puff Up' are curved. Below this text is yellow text that reads 'Stick out your stomach as if it were filled with water.' A color image of the bacteria is in the center of the circle, below the yellow text. Below the image is white text that reads '*Vibrio alginolyticus*: one of more than 12 species of bacteria that make tetrodotoxin poison in pufferfish.' '*Vibrio alginolyticus*' is italicized because it is a scientific name.

At the bottom of the panel is a clickable link. The link is enclosed in a yellow oval with black text in the center that reads 'Show Me.' If the link is clicked, a new webpage opens containing a graphic. This graphic shows KU Natural History Museum student employee, Anna, mimicking the inflation of a pufferfish. The title of the graphic reads 'Puff Up Like a Pufferfish' in black text on a white background. The text is centered on the webpage. Below the title, on the left side of the graphic, is an image of Anna with a label below the image that reads 'Before' in white text on a black background. Anna is standing up straight. On the right side of the graphic is another image of Anna with a label below the image that reads 'After' in white text on a black background. They are standing up straight. But in this image, they have stuck out their gut and puffed their cheeks. Also, in the middle of the graphic, below the title, is a light blue box. At the top of this box is black text that reads 'Bacteria found in tetrodotoxin.' Below this text is a color image of bacteria. Below the image is a label that reads '*Vibrio alginolyticus*' in black italicized text. '*Vibrio alginolyticus*' is italicized because it is a scientific name. At the bottom of the light blue box is black text that reads 'Tetrodotoxin in pufferfish is poisonous, and it's made by one of more than twelve species of bacteria. Anna shows us how to puff up like a pufferfish.'

At the bottom right of the page are three clickable links. The first link has a heart and is followed by the text 'Appreciate.' The second link is the Twitter logo followed by the text 'Tweet.' The last link is the Facebook logo followed by the text 'Share.' Text of each link is black on a white background.

At the bottom of the page are two clickable links to webpages for Adobe's General Terms of Use ('Terms of service') and Adobe's Privacy Center ('Privacy policy') and a clickable link to a pop-up to report abuse on the webpage ('Report abuse'). The text for the links is white on a black background.

- Distant relative of herring
  - Image description: In a green panel are two items. The first item is on the left side of the panel. This is an image of cartoon bacteria, specifically three white bacteria, enclosed in a yellow circle. Above the circle is white text that reads 'x400-1000,' which states the magnification of these bacteria. Below the circle is white text that reads 'Bacteria.' Below this text is smaller text that reads 'back-tier-e-ah' enclosed in parenthesis. This states how to pronounce the word bacteria.

The second item is on the right side of the panel. This is white text that provides clues about microbes related to a museum specimen from the Mobile Museum. The text is written as a poem with the title "Who am I?" in bold. The text at the end of the poem is italicized.

#### **Who am I?**

50 million years ago swimming in the river I would be.

When I died, my parts decomposed in a microbial feeding spree.

Some bacteria formed a film that helped make the fossil that is me.

*Hint: I am related to herring.*

- Image description: A scientific illustration of a distant relative of herring. The distant relative of herring is realistic and its colors are mostly silver with the appearance of texture caused by the scales all over its body. Its face is directed towards the right side of the webpage. Its tail fin is directed towards the left side of the webpage. It is on a green background.
- Image description: A green panel on the right side of the webpage is superimposed on the illustration of the distant relative of herring. White, bold text reads 'Distant relative of herring' at the top of the panel. Underneath the text is a yellow line with artistic elements. Below the line is white text that reads 'Diplomystus, Eocene (56-34 mya).' 'Diplomystus' is written in bold text. Below

this text is an image of a fossil of the distant relative of herring. The fossil is black and is imprinted on a rectangularly shaped rock that is off-white in color. A scale bar is located below the fossil and includes white text that describes the measurement of the fossil. This text reads '1 inch (25.4mm),' so the scale bar represents one inch, or 25.4 millimeters. Below the fossil is a graphic that provides information about *Pseudoalteromonas*, bacteria, and a prompt to perform a specific action. The text is enclosed in a black circle that mimics the lens of a magnifying glass. White, bold text at the top of the graphic reads 'Bond Like in a Biofilm.' The word 'Bond' is curved. Below this text is yellow text that reads 'Put your hands together with your neighbors to cover a surface.' A black and white image of a close-up of bacteria with a green area pointing to mineralization around bacteria in the image is below the yellow text. The text that describes what the green arrow is pointed at is below the image in white text. It reads 'mineralization around bacteria.' Below the image and its label is white text that reads '*Pseudoalteromonas*: bacteria in biofilms thought to help form fossils.' The word '*Pseudoalteromonas*' is italicized because it is a scientific name.

- **Stromatolites**

- **Image description:** In a green panel are two items. The first item is on the left side of the panel. This is an image of cartoon bacteria, specifically three white bacteria, enclosed in a yellow circle. Above the circle is white text that reads 'x400-1000,' which states the magnification of these bacteria. Below the circle is white text that reads 'Bacteria.' Below this text is smaller text that reads 'back-tier-e-ah' enclosed in parenthesis. This states how to pronounce the word bacteria.

The second item is on the right side of the panel. This is white text that provides clues about microbes related to a museum specimen from the Mobile Museum. The text is written as a poem with the title "Who am I?" in bold. The text at the end of the poem is italicized.

**Who am I?**

Ancient bacteria that lived in layers built up with sediment.

We changed the climate in what is known as the Great Oxygenation Event.

Today, our bacteria form harmful blooms that are both toxic and unpleasant.

*Hint: look for colored layered rocks.*

- Image description: A scientific illustration of stromatolites. The stromatolites are realistic and their colors are mostly light green with some black color at the top. The illustration is also textured. Additionally, the stromatolites are drawn so they appear to be on white sand. This illustration is on a green background.
- Image description: A green panel on the right side of the webpage is superimposed on the illustration of the stromatolites. White, bold text reads 'Stromatolites' at the top of the panel. Underneath the text is a yellow line with artistic elements. Below the line is white text that reads 'Mesoproterozoic (1.6-1 bya).' Below this text is an image of a fossil. The fossil is black and white and rectangularly shaped. A scale bar is located below the fossil and includes white text that describes the measurement of the fossil. This text reads '1 inch (25.4mm),' so the scale bar represents one inch, or 25.4 millimeters. Below the fossil is an image of another fossil. Above this fossil image is white text that reads 'Eocene (56-34 mya).' The fossil image shows a rectangular fossil that is light brown with some faint imprints and textures on it. A scale bar is located below the fossil and includes white text that describes the measurement of the fossil. This text reads '1 inch (25.4mm),' so the scale bar represents one inch, or 25.4 millimeters. Below the fossils is a graphic that provides information about *Synechococcus*, bacteria, and a prompt to perform a specific action. The text is enclosed in a black circle that mimics the lens of a magnifying glass. White, bold text at the top of the graphic reads 'Build Layers Like a Bacteria.' The word 'Build' is curved. Below this text is yellow text that reads 'Move your hands one on top of the other to form layer upon layer.' A color image of a close-up of bacteria is below the yellow text. Below the image is white text that reads '*Synechococcus*: photosynthetic bacteria (cyanobacteria) found in living stromatolites.' The word '*Synechococcus*' is italicized because it is a scientific name.
- Dog lichen
  - Image description: In a green panel are two items. The first item is on the left side of the panel. This is an image of cartoon microbes. The first is an image of cartoon fungi, specifically two white fungi and a close-up of the hyphae of the capped fungi, enclosed in a yellow circle. To the right of the circle is white text that reads 'Fungi.' Below this text is smaller text that reads 'fun-guy' enclosed in parenthesis. This states how to pronounce the word

fungi. Lastly, below this pronunciation, is text that reads 'x20-400,' which states the magnification of these fungi. A thin yellow line on a diagonal separates this first image and the second image. The second image is of cartoon bacteria, specifically three white bacteria, enclosed in a yellow circle. To the left of the circle is white text that reads 'Bacteria.' Below this text is smaller text that reads 'back-tier-e-ah' enclosed in parenthesis. This states how to pronounce the word bacteria. Lastly, below this pronunciation, is text that reads 'x400-1000,' which states the magnification of these bacteria.

The second item is on the right side of the panel. This is white text that provides clues about microbes related to a museum specimen from the Mobile Museum. The text is written as a poem with the title "What am I?" in bold. The text at the end of the poem is italicized.

### **What am I?**

I am the crunchy stuff on a tree, a partnership you might miss.

One partner is bacteria that uses photosynthesis.

The other forms my structure. The builder, a fungus.

*Hint: you might think I look like moss.*

- Image description: A scientific illustration of dog lichen. The dog lichen illustration is realistic and its colors include light blue and green. The illustration is predominantly light blue. The illustration is also textured and shows the irregular shape of the lichen. This illustration is on a green background.
- Image description: A green panel on the right side of the webpage is superimposed on the illustration of the dog lichen. White, bold text reads 'Dog lichen' at the top of the panel. Underneath the text is a yellow line with artistic elements. Below the line is white text that reads '*Peltigera praetextata*.' '*Peltigera praetextata*' is italicized because it is a scientific name. Below this text is an image of lichen. It is a color image, and the lichen in the image is brown-green. A scale bar is located below the lichen and includes white text that describes the measurement of the lichen. This text reads '1 inch (25.4mm),' so the scale bar represents one inch, or 25.4 millimeters. Below the lichen is a graphic that provides information about *Nostoc*, a bacteria, and a prompt to perform a

specific action. The text is enclosed in a black circle that mimics the lens of a magnifying glass. White, bold text at the top of the graphic reads 'Fuse Like a Fungus.' The word 'Fuse' is curved. Below this text is yellow text that reads 'Use fingers from one hand to grow and spread around the other.' A color image of a close-up of bacteria is below the yellow text. Below the image is white text that reads '*Nostoc*: photosynthetic bacteria (cyanobacteria) that grows with fungus in the Kansas dog lichen *Peltigera*.' The words '*Nostoc*' and '*Peltigera*' are italicized because they are scientific names.

- Western honey bee
  - Image description: In a green panel are two items. The first item is on the left side of the panel. This is an image of cartoon fungi, specifically two white fungi and a close-up of the hyphae of the capped fungi, enclosed in a yellow circle. Above the circle is white text that reads 'x20-400,' which states the magnification of these fungi. Below the circle is white text that reads 'Fungi.' Below this text is smaller text that reads 'fun-guy' enclosed in parenthesis. This states how to pronounce the word fungi.

The second item is on the right side of the panel. This is white text that provides clues about microbes related to a museum specimen from the Mobile Museum. The text is written as a poem with the title "Who am I?" in bold. The text at the end of the poem is italicized.

#### **Who am I?**

If I get this fungus it spells trouble for my colony.

The spores can contaminate water, pollen and honey.

Spores in my gut cells burst and spread. Oh the misery!

*Hint: Kansas state insect.*

- Image description: A scientific illustration of a western honey bee. The bee is realistic and it is a colorful image. The bee has yellow and black stripes on its abdomen, or rear end. It has wings attached to its thorax, or midsection. The bee's head faces the right side of the webpage. The bee's rear end faces the left side of the webpage. This illustration is on a green background.
- Image description: A green panel on the right side of the webpage is superimposed on the illustration of the western honey bee. White, bold text reads 'Western honey bee' at the top of the

panel. Underneath the text is a yellow line with artistic elements. Below the line is white text that reads '*Apis mellifera*,' which is italicized because it is a scientific name. Below this text is a color image of many western honey bees that are pinned and mounted on a museum display. A scale bar is located below the image of the display and includes white text that describes the size of the display. This text reads '1 inch (25.4mm),' so the scale bar represents one inch, or 25.4 millimeters. Below the display is a graphic that provides information about *Nosema*, a fungus, and a prompt to perform a specific action. The text is enclosed in a black circle that mimics the lens of a magnifying glass. White, bold text at the top of the graphic reads 'Prod Like a Polar Tube.' The word 'Prod' is curved. Below this text is yellow text that reads 'With your fingers facing down and back of hands together, quickly fling your hands up and out, then poke your neighbor.' A black and white image of the fungus, *Nosema*, is in the center of the circle, below the yellow text. Below the image is white text that reads '*Nosema*: small fungus that punctures bee gut cells with a tube. It turns part of itself inside out and delivers spores.' '*Nosema*' is italicized because it is a scientific name.

▪ Petrified wood

- Image description: In a green panel are two items. The first item is on the left side of the panel. This is an image of cartoon fungi, specifically two white fungi and a close-up of the hyphae of the capped fungi, enclosed in a yellow circle. Above the circle is white text that reads 'x20-400,' which states the magnification of these fungi. Below the circle is white text that reads 'Fungi.' Below this text is smaller text that reads 'fun-guy' enclosed in parenthesis. This states how to pronounce the word fungi.

The second item is on the right side of the panel. This is white text that provides clues about microbes related to a museum specimen from the Mobile Museum. The text is written as a poem with the title "What is it?" in bold. The text at the end of the poem is italicized.

**What is it?**

They spread through soil, find plant roots and grow with them – some you can even see.

Nutrients are passed back and forth from them to plants including trees.

Plants of all kinds partner with them, including ancient ones like me.

*Hint: it's tree-mendous.*

- Image description: A scientific illustration of petrified wood. The image is realistic and it is a color image with grays, whites, and browns. The image resembles a present-day tree stump, including the texture of the stump. This illustration is on a green background.
- Image description: A green panel on the right side of the webpage is superimposed on the illustration of the petrified wood. White, bold text reads 'Petrified wood' at the top of the panel. Underneath the text is a yellow line with artistic elements. Below the line is a color image of petrified wood. The petrified wood is rectangularly shaped, and its color is brown. A scale bar is located below the image of the display and includes white text that describes the size of the petrified wood. This text reads '1 inch (25.4mm),' so the scale bar represents one inch, or 25.4 millimeters. Below the display is a graphic that provides information about hyphae and a prompt to perform a specific action. The text is enclosed in a black circle that mimics the lens of a magnifying glass. White, bold text at the top of the graphic reads 'Spread Like Hyphae (hi-fay).' The word 'Spread' is curved. The words 'hi-fay' enclosed in parenthesis states how to pronounce the word hyphae. Below this text is yellow text that reads 'Stretch your arms and fingers out away from your body.' A color image of hyphae is in the center of the circle, below the yellow text. Below the image is white text that reads 'Hyphae: most fungi grow as long, thin tubes that branch out.'

At the bottom of the panel is a clickable link. The link is enclosed in a yellow oval with black text in the center that reads 'Show Me.' If the link is clicked, a new webpage opens containing a graphic. This graphic shows the left and right hands of KU Natural History Museum student employee, Kestrel, mimicking the spread of fungal hyphae. The title of the graphic is in black text on a light blue background between Kestrel's left and right hands on the left side of the graphic. The title reads 'Spread Like Hyphae.' The fingers on Kestrel's hands are spread out, mimicking the spread of hyphae. The image of her hands is on a white background. On the right side of the graphic is a color image of a close-up of fungal hyphae. Below the image is text that reads 'Most of a fungus grows underground, branching out as thin tubes. These thin tubes are called hyphae. Kestrel stretches out her fingers to model the

spread of hyphae.' The image is colored and the text is black. Both are on a light blue background.

At the bottom right of the page are three clickable links. The first link has a heart and is followed by the text 'Appreciate.' The second link is the Twitter logo followed by the text 'Tweet.' The last link is the Facebook logo followed by the text 'Share.' Text of each link is black on a white background.

At the bottom of the page are two clickable links to webpages for Adobe's General Terms of Use ('Terms of service') and Adobe's Privacy Center ('Privacy policy') and a clickable link to a pop-up to report abuse on the webpage ('Report abuse'). The text for the links is white on a black background.

- Crinoid

- Image description: In a green panel are two items. The first item is on the left side of the panel. This is an image of cartoon protists, specifically three white protists, enclosed in a yellow circle. Above the circle is white text that reads 'x20-100,' which states the magnification of these protists. Below the circle is white text that reads 'Protists.' Below this text is smaller text that reads 'pro-tists' enclosed in parenthesis. This states how to pronounce the word protists.

The second item is on the right side of the panel. This is white text that provides clues about microbes related to a museum specimen from the Mobile Museum. The text is written as a poem with the title "Who am I?" in bold. The text at the end of the poem is italicized.

**Who am I?**

I am bits of a fossil from when Kansas was covered by a sea.

Some mistake me for a plant, but I am an animal you see.

Algae and protists with hairs would both be food for me.

*Hint: look for small discs with a hole in the middle.*

- Image description: A scientific illustration of a crinoid. The image is realistic and it is a color image with mostly oranges. The stem of the crinoid grows up from the bottom of the image. At the top of

the image is the crown of the crinoid. This illustration is on a green background.

- Image description: A green panel on the right side of the webpage is superimposed on the illustration of the crinoid. White, bold text reads 'Crinoid' at the top of the panel. Underneath the text is a yellow line with artistic elements. Below the line is white text that reads '*Stachyocrinus* sp.,' and '*Stachyocrinus*' is italicized because it is a scientific name. Below this text is a color image of three fossil crinoids that are mounted on a museum display. A scale bar is located below the image of the display and includes white text that describes the size of the crinoids. This text reads '1 inch (25.4mm),' so the scale bar represents one inch, or 25.4 millimeters. Below the display is a graphic that provides information about *Epiplocytilis undella*, a protist, and a prompt to perform a specific action. The text is enclosed in a black circle that mimics the lens of a magnifying glass. White, bold text at the top of the graphic reads 'Create a Current Like You Have Cilia (sill-e-ah).' The words 'Create a Current' are curved. The words 'sill-e-ah' are enclosed in parenthesis and state how to pronounce the word cilia. Below this text is yellow text that reads 'Fan out your fingers around your mouth and wave them all in the same direction.' A color image of the protist, *Epiplocytilis undella*, is in the center of the circle, below the yellow text. Below the image is white text that reads '*Epiplocytilis undella*: protist that crinoids eat. It has a shell and uses cilia (short hairs) around its 'mouth' to eat and move.' '*Epiplocytilis undella*' is italicized because it is a scientific name.
- Fusulinids
  - Image description: In a green panel are two items. The first item is on the left side of the panel. This is an image of cartoon protists, specifically three white protists, enclosed in a yellow circle. Above the circle is white text that reads 'x20-100,' which states the magnification of these protists. Below the circle is white text that reads 'Protists.' Below this text is smaller text that reads 'pro-tists' enclosed in parenthesis. This states how to pronounce the word protists.

The second item is on the right side of the panel. This is white text that provides clues about microbes related to a museum specimen from the Mobile Museum. The text is written as a poem with the title "Who am I?" in bold. The text at the end of the poem is italicized.

**Who am I?**

Shallow Kansas oceans were home to me many years ago.

Single-celled with a crunchy shell is something you should know.

Today my cousins still live in water or the seafloor below.

*Hint: look for something that looks like rice or wheat.*

- Image description: A scientific illustration of two fusulinids. The image is realistic, and it is a color image with mostly whites. The fusulinids are oval-shaped and tapered at their ends. Each fusulinid has texture incorporated onto the illustration to show lines and ridges on it. This illustration is on a green background.
- Image description: A green panel on the right side of the webpage is superimposed on the illustration of the fusulinids. White, bold text reads 'Fusulinids' at the top of the panel. Underneath the text is a yellow line with artistic elements. Below the line is white text that reads '*Fusulina*, Pennsylvanian (323-299 mya),' and '*Fusulina*' is italicized because it is a scientific name. Below this text is a color image of fossil fusulinids. The fossils are small and congregated on an irregularly shaped brown rock. A scale bar is located below the image of the fossils and includes white text that describes the size of the fossils. This text reads '1 inch (25.4mm),' so the scale bar represents one inch, or 25.4 millimeters. Below the display is a graphic that provides information about *Triticites*, a protist, and a prompt to perform a specific action. The text is enclosed in a black circle that mimics the lens of a magnifying glass. White, bold text at the top of the graphic reads 'Slide Like You Have a Pseudopod (sue-doh-pod).' The word 'Slide' is curved. The words 'sue-doh-pod' are enclosed in parenthesis and state how to pronounce the word pseudopod. Below this text is yellow text that reads 'Slide a foot out and then pull the rest of you along to meet it.' A color image of a protist, *Triticites*, is in the center of the circle, below the yellow text. Below the image is white text that reads '*Triticites*: protist that stuck out and contracted part of its cell (pseudopod) to move. Many living protists do this.' '*Triticites*' is italicized because it is a scientific name.

At the bottom of the panel is a clickable link. The link is enclosed in a yellow oval with black text in the center that reads 'Show Me.' If the link is clicked, a new webpage opens containing a graphic. This graphic shows KU Natural History Museum student employee, Prakriti, mimicking the movement of a pseudopod. The

title of the graphic is located off-center and reads 'Slide Like You Have a Pseudopod' in black text on a light blue background. To the left of the title is an image of Prakriti on a white background standing up straight with her right foot forward and her left foot behind her. She is mimicking the sliding motion of a pseudopod. The image of Prakriti and the title are on the left side of the graphic. On the right side of the graphic is a color image of a protist. A black line points to a part of the protist that is located at the top left of the image. The black line is labeled with black text that reads 'Pseudopod.' The line points to the pseudopod of the protist in the image. Below the image is text that reads 'Some microbes, like protists, stick out a part of their body and pull themselves towards it to get around. Prakriti shows us how to move like a protist using its pseudopod.' The image is colored and the text is black. Both are on a light blue background.

At the bottom right of the page are three clickable links. The first link has a heart and is followed by the text 'Appreciate.' The second link is the Twitter logo followed by the text 'Tweet.' The last link is the Facebook logo followed by the text 'Share.' Text of each link is black on a white background.

At the bottom of the page are two clickable links to webpages for Adobe's General Terms of Use ('Terms of service') and Adobe's Privacy Center ('Privacy policy') and a clickable link to a pop-up to report abuse on the webpage ('Report abuse'). The text for the links is white on a black background.

○ Conclusion

- Image description: A clickable link containing a heart followed by the text 'Appreciate' is enclosed in a long oval. The link is centered. The color of the link is gray, and it is on a green background.
- Image description: The logo for the KU Natural History Museum, colored white, is on a black background. The logo contains two circles: a small inner circle enclosed in a large circle. Text reads 'KU Natural History Museum' in all caps in the top right of the logo between the small inner and large outer circles. A cartoon depiction of a mosasaur fossil skeleton is mostly enclosed in the small inner circle, although its back flipper and tail bleeds outside the small inner circle into the space between the small inner and large outer circles and space outside the large outer circle in the bottom left of the logo.

Below the logo are two clickable links to webpages for Adobe's General Terms of Use ('Terms & Conditions') and Adobe's Privacy Center ('Privacy Policy') and a clickable link to a pop-up to report abuse on the *Microbes*

*on the Move* website ('Report Abuse'). Texts for the links are white on a black background.