**Life Processes in Animals Module**

**Grade level:** First

**Topic:** Animal Habitats

**SOL:**

**1.1** The student will demonstrate an understanding of scientific reasoning, logic, and the nature of science by planning and conducting investigations in which

i) observations and data are recorded, analyzed, and communicated orally and with simple graphs, pictures, written statements, and numbers;

**1.5** The student will investigate and understand that animals, including people, have life needs and specific physical characteristics and can be classified according to certain characteristics. Key concepts include

a) life needs (air, food, water, and a suitable place to live);

Daily Question: What are animal habitats?

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| Procedures for Learning Experience | Guiding Questions | Materials Needed | **E**valuation (Assessment) |
| **Engagement:** Discuss with students what makes their home a “home”: what does something need to have in order to be a home? Ask students if animals have homes, and if so, what does an animal need to have to make it a “home”? Explain that animal homes are called habitats, which contain the things that animals need to survive (space, food, water, shelter). View National Geographic informative video (see Materials Needed for link) on opossums. Discuss what students learned about opossums from the video, particularly whether they saw the 4 things that animals need to survive. Ask students to describe the opossums’ habitat based on their observations in the video Project the unit KWL chart on the screen and take class notes any new information.  Plan B: If the video and/or computer are not working, explore opossums through nonfiction books (see Materials). If projector is not working, use chart paper to reconstruct the Unit KWL chart. | What makes your home a “home”?  What do you need to survive in your home?  What are habitats?  What do you know about opossum habitats? | Video of opossum habitats (found at <http://video.nationalgeographic.com/video/opossum>), projector, computer, digital document with the Unit KWL chart  Plan B: chart paper, nonfiction picture books: Opossums, by Mary Dunn, Tricky Opossums, by Catherine Nichols, Opossums by Christine Webber.  Digital tech: online video, computer, digital document, projector  Nondigital: chart paper, nonfiction picture books | Informal observation of student participation |
| **Exploration:** Give each table a box containing a large quantity of leaves, sticks, grass, bark, fruit, a water dish (empty, teacher can fill afterwards) and small pieces of cardboard. Explain that each table group will build a model of an opossum habitat. Review safety procedures about using materials and working in groups. Ask students to consult the KWL chart about what they know about possums and use the video to support their models. Tell students this will help them Steve from Animal Control to take care of the opossum that visited the school.  Plan B: If the projector is not working it display the Unit KWL chart, reconstruct it using chart paper. | What does an opossum need to survive?  How can you build a model for an opossum habitat? | Cardboard boxes, plastic containers, leaves, sticks, grass, bark, fruit, water dish, small pieces of cardboard, paper, markers, crayons, scissors, glue, projector, digital document the Unit KWL Chart, large sheets of paper to put over desks to keep clean.  Plan B: chart paper  Digital Technology: Projector, digital document  Nondigital Technology: markers, crayons, scissors, glue, paper, cardboard, plastic containers | Formal observation of student participation. |
| **Explanation:** Create a mock-museum exhibit by setting up display cards at each table with the students’ names and “Opossum Habitat”. After students have been given the opportunity to view one another’s, ask students to either appoint a table leader to present to the class or present as a group to explain why they constructed their habitat the way they did. Students should use the microphone when presenting. Students will respond to questions from teachers and classmates after they finish speaking. Record all presentations on the video camera. Check to see if each habitat has the 4 things necessary for an opossum to live (food, water, shelter, space). Tell students that scientists share their information to help others so you will be posting their presentations on classroom website.  Plan B: If the video camera is not working, take photographs while students are presenting and take photographs of students’ models to be displayed on the class website. Summarize students’ presentation by taking notes to include with the photographs. | What do you notice about other groups’ habitat models?  How did you build your habitat model? Why did you build your model that way?  Does your habitat model have everything it needs for an opossum to survive? | Table groups’ completed habitat models, microphone device, video camera, class website, display cards  Plan B: digital camera  Digital Technology: microphone, video camera, class website, digital camera  Nondigital Technology: paper | Habitat will be graded based on whether or not it includes the 4 things necessary for animals to live. |
| **Extension:** Display a large picture of an opossum that shows the opossums long, bald tail. Ask students to make a hypothesis about how their tails help them survive in their habitats.  Plan B: If the projector and/or computer are not working, have copies of the picture to be distributed to table groups. | What does an opossums tail look like?  How might the opossum use its tail in its habitat?  What inferences can you make about an opossum based on what you observe about its tail? | Photograph of opossum tail (found at [http://kids.britannica.com/elementary/art-90310/A-young-opossum-hangs-from-a-branch-by-its-tail /](http://kids.britannica.com/elementary/art-90310/A-young-opossum-hangs-from-a-branch-by-its-tail%20/)), document camera/computer projector  Plan B: 6 printed copies of picture.  Digital Technology: projector, online photograph  Nondigital Technology: printed pictures | Informal observation of student participation |

