

Grade 1 Science

Junk Modeling

Students will be able to demonstrate understanding of animals' physical adaptations by building wearable adaptations using recyclables.

Next Generation Science Standards

1-LS1-1: Use materials to design a solution to a human problem by mimicking how plants and/or animals use their external parts to help them survive, grow, and meet their needs.

Materials:

Where Do I Live? book

Rolls of masking tape

Scissors

Lots of recyclables, including things like egg cartons, carryout food containers, yogurt cups, cardboard boxes, paper towel tubes, milk jugs, plastic bottle caps, etc.

Procedure: 1. The teacher reads *Where Do I Live?* and students try to analyze how the animals' bodies make them suitable for their environments. 2. The teacher asks students how they themselves adapt to their environment; for example, how do they dress when it's warm or cold? What do they wear if they are doing something dangerous, like riding a bike? 3. The teacher explains that students get to use materials to build something that will help keep them safe or help them get something else they need, like food or shelter. 4. The teacher models the entire process, deciding on something he/she wants to build, then selecting the necessary materials. The teacher models tearing or cutting masking tape, and how a friend can help if necessary. The teacher puts together the model and explains how it would be helpful. Some examples include: a Styrofoam clam shell on top of a long tube, to help get fruit off of tall trees; egg carton "armor" to keep you safe if you fell; a hat with big cardboard "ears" to help you hear better, etc.

Assessment: The teacher lets each child present his/her creation and analyzes if the idea show a potential adaptive feature that would be useful.

Standards obtained from:

NGSS Lead States. 2013. *Next Generation Science Standards: For States, By States*. Washington, DC: The National Academies Press.