WEEK 8 Day 5

Discovery Table: Feathers, Fur, and Skin

Children investigate material for making gloves to keep hands warm and record data.

Big Idea	Like humans, animals are part of interdependent communities that are affected by, and adapt to, the environment that surrounds them.				
Guiding Question	What do animals need to survive?				
Vocabulary	texture: the feel or appearance of a surface temperature: how hot or cold something is				
Materials and Preparation	 discovery table or large bin ice cubes, at least 12, preferably more Place the ice cubes in the Discovery Table/bin immediately before Centers begin. winter gloves, 1 pair, as a sample large ziploc bags, at least 10 small ziploc bags, at least 10 material to represent fur, such as faux fur, fabric, or felt, several pieces 6 x 6 inches or smaller feathers, real or pretend, several handfuls 1-minute sand timer sticky dots or other plain stickers, 3 for each child, optional Gloves Data chart, one per child clipboards cloth or paper towel Place all materials near the Discovery Table. Bring a selection of materials, including one ice cube, to the Intro to Centers. 				
Intro to Centers	Animals have coverings on their bodies to keep their bodies warm in cold weather.				

Look at what I have here; what are these? Show the gloves.

Rub your hands together if you have worn gloves before.
When the temperature is cold outside, sometimes people wear gloves or mittens to keep their hands warm.
These gloves are made of _____.

This week at the Discovery Table, you will investigate what type of material might be best to make a pair of gloves to keep hands warm. People also use gloves to keep their hands clean; those are often made from plastic or rubber and are not designed for warmth.

Here are the materials you will use: feathers and fur. How do they feel?

Pass the materials around and encourage children to use adjectives to describe them.

The feature and the fur have different **textures**—they feel differently on the surface.

Repeat some of the adjectives children have used to describe the textures.

For this investigation, you will make models of gloves using these materials.

Demonstrate making a model of a glove by placing a smaller bag inside a larger one. Fill the space between the bags with one of the materials. Test the model by putting a hand inside the smaller bag.

Now we have a model of a glove made with a feather filling.

As scientists, you will test the glove by wearing it and holding ice cubes with your hand for one full minute. You'll think about how cold your hand gets. How well does the glove protect your hand from the cold?

Model wearing the glove, holding the ice cube, and using the sand timer.

Scientists communicate about what they discover, their data. As you experiment, you'll record your data on this chart.

Show the Gloves Data chart. Name the pictures, and explain the scale indicating temperatures from freezing to warm. Demonstrate how to place a sticker (or mark the chart with pencil) according to their findings.

During Centers

Children experiment with materials to determine which material most successfully blocks the cold. They make model gloves with each material: bags only (representing skin), fur, and feathers. Testing one material at a time, children wear the glove and hold an ice cube for one minute.

	Assessing their experience of cold/warmth, they record their findings on the Glove Data chart. A sand timer is used to keep track of the one minute. It may be helpful for children to work in pairs to manage the various steps of the investigation. Children use data from their investigation to make a claim about which material would be best suited for a glove. If time permits, encourage children to explore the classroom to find			
Facilitation	 additional materials to test as insulation in model gloves. What do you notice about the texture of these materials? What does your data tell you? If you were to design winter gloves using one of these materials, which material would you use? Why? How else might people, birds, or wolves stay warm? What animals do you know that have fur? Feathers? Skin? How might an animal's covering help it to survive in its habitat? What other kinds of coverings do animals have? Why do you think they have those coverings? 			
Standards	SL.1.K.a Participate in collaborative conversations about kindergarten topics and texts with peers, and adults in small and larger groups. K-LS1-1 Recognize that all plants and animals grow and change over time.			

Notes		