ANIMAL ADAPTATIONS
LIVING WINTER
POST-VISIT LESSON PLAN

Objectives:
Students will design structural adaptations of an animal that demonstrates a response of the living thing to their environment.

Materials:
- Chart paper or blackboard
- "Animal Design" worksheet
- Recycled Materials (ie. egg cartons, milk cartons, straws, popsicle sticks, etc.)
- Adhesives or modeling materials (ie. clay, glue, tape)

Lesson:
1. Discuss the idea of animals and plants adapting to their environment.

2. Review these examples of structural adaptations:
   - grey squirrels' fur becoming black to absorb the sun's light energy
   - groundhogs adding a layer of fat for insulation
   - coyotes, beavers and muskrats growing thicker fur
   - birds beaks adapting to their food sources

3. Ask students to provide other examples of structural adaptations that help animals or plants survive in a particular environment.

4. Guided Imagery: Invite students to close their eyes while you describe a particular environment. Either make-up your own, or use the example script below:
   It is mid-winter in the Living Winter Forest. A layer of snow 20 cm. deep covers the ground. You hear a strong wind blowing in from the North West. The pine trees, heavy with pinecones, are swaying in the wind and the temperature is frigid. You can feel your eyelashes freezing! You can hear chickadees calling above you - "chick-a-dee-dee-dee" - and as evening sets in, you hear a coyote yip-howl in the distance. A squirrel watches you from it's tree-cavity up above. When you look down, you notice the tiny openings to subnivean tunnels that mice use to travel. There are still a few red berries on the bushes nearby. As you tiredly walk, your boots sink down into the deep snow and your feet are getting cold! Luckily, you see your cozy, warm home up ahead,

5. Ask students to brainstorm some structural adaptations that might help an animal living in the described environment.

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6. Ask students why each of the adaptations would be helpful for the animal? Does it help for: Food? Shelter? Warmth? Water? Predator-avoidance? Mobility?

Activity:

1. Students will work alone or with a partner to design an animal that will survive in the described environment. Students should include at least 3 adaptations and write a description of each of the adaptations.

2. Students will work alone or with a partner to create a 3-dimensional model of their animal using recycled materials.

Closure:

Students present their models to the class while explaining how their adaptations help them survive the winter environment.

Name: _____

Animal Design

Draw your animal below. Include *adaptations* that will help this animal survive winter conditions:

Describe 3 of your animal's adaptations:

1) _____

2) _____

3) _____

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