

<b>ecoMentors Lesson Plan Template: Helping kids explore the planet! www.ecomentors.ca</b>		
<b>Title: Daily and Seasonal Cycles</b>	<b>Grade Level(s): 1</b>	<b>Time/Date:</b>
<b>School:</b>	<b>Teacher:</b>	
<b>Directions to school, class:</b>		
<b>Contact Info:</b>		
<b>Ontario Curriculum Connection: Earth and Space Systems – Daily and Seasonal Cycles</b>		
Vocabulary: Words & Concepts your class may be learning, look these up yourself too!		
<b>Cycle</b> - an interval during which a recurring sequence of events occurs <b>The 4 seasons:</b> Spring, summer, fall, winter <b>Hibernation</b> – winter sleep of animals		
Materials and Equipment: List these before and while you plan and revise so you're prepared.		
Black board and chalk		
What is your class accomplishing?: Learning & Activity Goals, Objectives		
<ul style="list-style-type: none"> <li>• <b>Demonstrate an understanding of changes that occur in daily and seasonal cycles and of how these changes affect the characteristics, behavior and location of living things</b></li> <li>• <b>Identify the sun as a source of heat and light</b></li> <li>• <b>Ask questions about and identify needs or problems arising from observable events in the environment and explore possible answers and solutions</b></li> <li>• <b>Describe changes in the characteristics, behavior and location of living things that occur in seasonal cycles (e.g., trees shed their leaves, birds migrate)</b></li> <li>• <b>Describe ways in which humans modify their behavior to adapt to changes in temperature and sunlight during the day.</b></li> </ul>		

## PROCEDURE

The Spark: Introductions, Demonstrations, Show and Tell, Topic Intro (Break the ice!) ~5-10min
Introduce yourself. Let students sit in a circle; explain that today we are talking about cycles. Explain that a cycle means that some events are repeated on a regular basis. <i>Good morning Class, today we are talking about cycles. Can anyone give an example of a cycle?</i> Let the students introduce themselves.
Brainstorming, Getting ideas, Connecting ideas (assess their knowledge!) ~10-20min
Ask the students if they know different cycles (seasons, day-night). <i>Can you name the seasons and the characteristics of the seasons? What is your favorite season? What happens within these seasons? What happens with the temperature? When is it warm and when is it cold? Where does the heat come from? What influences the seasons? (Sun). What happens with plants and animals when it gets warmer/colder? What other cycle is caused by the sun? (Day-night). What happens with plants/animals/humans when it gets dark/light?</i>
Activity, Game, Exercise, Debate, Puzzles, Problem Solving, Role Play ~10-30mins
Tell a short story about the 4 seasons. Tell the students to pay attention. Afterwards they can answer some questions and pick one of the 4 seasons and make a drawing.
<i>Spring: Spring starts on march 20. Nature wakes up; the trees juices start to flow and grow new, young green leaves. The flowers start to appear, and the fields become green. The weather is unpredictable. Sometimes it's sunny, sometimes it's cold and rainy. Because of the rain and the melting of snow rivers get bigger in spring. As spring progresses, migratory birds like swallows reappear. The temperature rises and the flowers attract bees and bumblebees. In their nest young birds call for food, their parents fly all day to catch insects. The days get longer and it's nice to be outside!</i>
<i>Summer: The season of nice, warm temperatures, ice creams, swimming and HOLIDAY! Summer starts on June 21<sup>st</sup>. On this day the sun is highest above our heads, and we have the longest day of the year. After this day slowly the days become shorter again.</i>

*Fall : The leaves on the trees become brown and fall down. The fall starts on September 22<sup>nd</sup>. In the morning the plants are usually covered with tiny droplets of water: dew. Dew is formed in the night, when the temperature is colder. The ground cools off really quickly and invisible water damp condenses to form dew. Because it gets colder and colder, the juice in the trees does not flow up to the leaves anymore. The leaves fall off the trees. On the ground they form a beautiful cover of colors, and they are decomposed by worms. This forms a new and fertile layer of earth for the plants of next year.*

*Winter: Cold, snow, hot chocolate and skating! Winter starts in December. When we are cold we can dress warm and stay inside. But what do animals do to protect themselves? Some rodents hide in the earth, where roots grow that they can eat. Some animals hibernate; they sleep a long sleep. They don't need to eat; they ate so much in fall that their body fat is enough to get them through winter. After all, if you just sleep, and don't run or play, you don't need much food! Some animals stay awake, but to prevent them from freezing they change their coat; in winter they grow extra fur; creating a nice, warm winter coat!*

Ask the class some questions after this: *When is the longest day of the year?* (summer)

*What do people do in each season?*(Spring: cleaning, summer: sun tan (why??> sun can be dangerous!), fall: rake leaves, chop wood, harvest apples, winter: dress warm, stay inside) *What do animals do in each season? What do animals do to protect themselves against the cold in winter?* (hibernate, hide, grow extra coat)

*Why do the leaves fall from the trees in autumn?* (Because of the cold the trees juice, that feeds the leaves, stops flowing). Think of some more questions yourself!

1.

2.

*Do you know which animals hibernate in winter?* Let the students come up with a list (draw pictures on the blackboard) of hibernating animals.

*Why is it difficult for animals to find food in wintertime?*

*What do we eat during each season?* Let the students come up with many examples!

Activity, Game, Exercise, Debate, Puzzles, Problem Solving, Role Play(Pt. II or Cont...) ~10-30mins

Let the students pick 1 season and make a drawing about this season. *In your drawing you should include a food that you eat in this season.* (apples-fall, asparagus – spring, fish-winter, strawberries-summer) Afterwards (presentation of findings), ask them to explain what they drew and why.

Contingency, Plan B, extra game or activity (Back up plan) ~5-10mins

Day and night: Make 2 columns on the blackboard, one with day (draw a sun) and one with night (draw a moon). Ask the students to name animals that are active during the day, and animals that are active during the night.

*If you are out during the day in summer; what do you have to be careful of?*

Presentation of Findings ~5-15mins

Let the students explain something about each season according to their drawing.

Review, Conclusion and steps towards continued action ~5-10mins

*Why is the sun important for us? Why or how can the sun be dangerous?*

References

Great work ecoMentor! After use of Lesson Plan revise, add ideas and repeat!