

<u>Themes</u>	<u>Concept</u>	<u>Language Arts</u>		<u>Math</u>		<u>Science</u>	
<u>Hunting Gathering</u>		<u>Activities</u>	<u>Resources</u>	<u>Activities</u>	<u>Resources</u>	<u>Activities</u>	<u>Resources</u>
Season: Spring Summer <u>Values</u> Respect Sharing Compassion Success Generosity Self-esteem Trust Cooperation Conflict resolution CELS	Birch Syruping	Students will read <i>Birch Sugaring</i> By R. Kennel on icsd112.ca under Our Stories What items did Josephine take to the birch camp? Where would Josephine set up her camp? Explain why certain trees were selected. Why weren't the same trees used two years in a row? List the steps of getting the birch sap from the tree to making birch syrup. How could Josephine tell when the syrup was ready? What would the children do when they were not helping with the syrup? Illustrate the birch camp using the information in the story. View the pictures of making birch syrup on icsd112.ca Have students create a caption for each picture. Have students write a narrative story of their life as a tree. Imagine slow growth, little movement, human contact, animal contact, and weather. Read <i>Fox Song</i> by Joseph Bruchac. Focus on gifts trees give us and how we should honour the trees. CELS COMMUNICATION INDEPENDENT LEARNING	icsd112.ca <i>Fox Song</i> by Joseph Bruchac	In late winter, start making a class chart noting the noon and night temperatures in your area. Predict when sap will start running. Sap starts flowing when cool nights (temperatures less than -3 C) are followed by warm days (temperatures greater than +2 C). Measuring Temperature: How do we measure temperature? How do we estimate temperature? Estimate the temperature of water at different points. What is the boiling point? How would we know when a substance is close to boiling point? Estimate amount of sap we may collect. Measuring amount of sap collected during excursion. Students should use milliliters. While in forest collect small section the trunk of a fallen tree Measuring the age of tree: -count tree rings -explore why some rings are thick and some are thin CELS CRITICAL AND CREATIVE THINKING NUMERACY	www.focusonforests.ca	Examine the sap using 5 senses. As a class boil the sap that has been collected. Examine the syrup with the 5 senses. What change of state occurs? What causes change of state? How is heat transferred? Convection, conduction and radiation? Illustrate each type of heat transfer. How is the syrup different from the sap? Science journal entry of what they experienced on the trip. Use a map of the local area from icsd112.ca to identify where the class is going birch sugaring. Where else are there stands of birch trees? How do you identify a birch tree? Is it deciduous or coniferous? What role do trees take in our local habitat? How are they helpful to humans and animals? Brainstorm and list uses. CELS CRITICAL AND CREATIVE THINKING TECHNOLOGY COMMUNICATION	icsd112.ca

Social Studies		Health		Arts		Phys. Ed	
<u>Activities</u>	<u>Resources</u>	<u>Activities</u>	<u>Resources</u>	<u>Activities</u>	<u>Resources</u>	<u>Activities</u>	<u>Resources</u>
<p>How are we interdependent with our natural environment? What resources do we get from our land? How can we protect them?</p> <p>As a class will go to the bush where there is a stand of birch trees when the weather is right for the sap to be running.</p> <p>Students will watch the elder prepare a birch tree for sap collecting. (cut the tree, insert twig, place pail) Have elder explain why the cut is made on a certain side of tree. In small groups students will prepare their own tree to collect sap (group members should identify where the cut in the tree should be made but adult help/close supervision will be needed for cutting the tree) A member of the group should be documenting each step with a digital camera.</p> <p>What was birch syrup used for long ago? What products do we have today that replace this? Why do some people still make birch syrup?</p> <p>CELS COMMUNICATION PERSONAL AND SOCIAL VALUES AND SKILLS</p>		<p>Organic foods versus synthetic foods.</p> <p>Have students read the label to store bought syrup. What are the ingredients? Have students research what one of the unfamiliar ingredients is. Students create an information card on their ingredient?</p> <p>Should you eat things that you do not know they are made of? Why do some items do not need to go in refrigerator?</p> <p>Have students look at the percentages of vitamins and minerals for a serving of syrup. What food group is it? How big is a recommended serving?</p> <p>Review with students safety issues for birch sugaring: -Stop, Drop, Roll -burn first aid -use of axe -safety around axes -bush safety</p> <p>CELS CRITICAL AND CREATIVE THINKING COMMUNICATION</p>		<p>Make a digital presentation of the Sap collecting process or the scavenger hunt. Students could use PowerPoint (slide show) or Publisher(collage) to show the process.</p> <p>Students can use the picture tools in these programs to create a cohesive, interesting presentation. Play with colour, outline, shape, transitions and animations.</p> <p>Look at branching pattern of trees: opposite, alternate and whorled. Use a field guide to identify different types of trees in the area. Students use their sketch book to sketch trees concentrating on branching patterns, leaf shapes and crown pattern.</p> <p>CELS TECHNOLOGY INDEPENDENT LEARNING</p>	Microsoft Office	<p>Hiking in the bush.</p> <p>Scavengers hunt while syrup is boiling.</p> <p>Students complete a digital scavenger hunt. In small groups take digital pictures of: -blueberry plant -animal droppings -pine cone -animal home - an insect -a flower -a broken twig -a chewed on twig - a flat rock -bird -mammal Etc.</p> <p>CELS CRITICAL AND CREATIVE THINKING TECHNOLOGY</p>	