

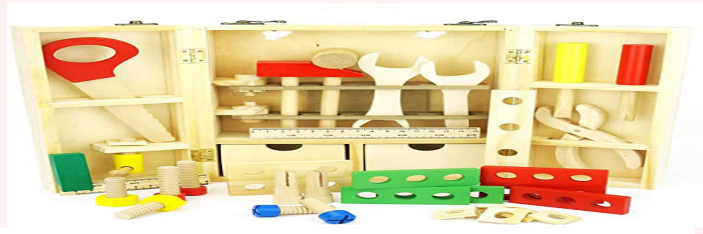
Lesson 3: What is 'Dry' Wood?

* Community connections: Ask a community member who is knowledgeable about getting wood to share with students how they get wood, and what they look for, what types of tools & safety wear they use. (10-15 min)

Objectives: Identify 'wet' and 'dry' wood.

Essential Questions:

What is good wood to burn? Why does some wood burn faster than others? What types of wood do we burn?



Alaska Native Values:

See connections: All things are related.
Hunter success
Traditional arts, skills and ingenuity

Standards:

SSC3. Asks questions and finds answers through active exploration of nature.
SSC 3. Describes changes in, makes predictions about, & describes relationships between living & non-living objects & natural events.
SSC1. Draws and constructs.
PSH6: Engages in play as a means of self-expression and creativity.
M3. Describes and compares measurable attributes.
L19. Understands writing has meaning.

Promoting Culture Self Assessment:

- I encourage and provide opportunities and experiences for children that support Alaska Native culture.
- I ensure that toys and play accessories that depict people are representative of the various cultural and ethnic groups both within my community and the society in general.
- I encourage and invite parents and community members to volunteer and assist with Alaska Native language and cultural activities.

Whole Group	Writing/Science Center	Play Center
<p>Materials: Day 1- bowl with water Two pieces of spruce Scale Hand-held wood moisture tester Hundreds chart</p>	<p>Materials: A variety of wood collected locally Big letter cards matching initial sound of wood (B for birch, A for Alder, S for Spruce, C for Cottonwood) Magnifying glass</p>	<p>Materials: Woodworking tool play set Blocks or wood</p>
<p>Activity: See lesson below.</p>	<p>Activity: Have students take time to observe different types of wood. What do they look like up close? What types of patterns, color do they have? Choose one to draw and practice writing the initial sound of the name for that piece of wood.</p>	<p>Activity: Play with students in pretending to build something. Use tape measure for measuring blocks of wood, saw things to the correct size, count while you hammer pieces together. INTEGRATE LEARNING THROUGH STUDENT PLAY (Students will love to play with you and its the best way to get them to learn new things)</p>

Activity



Engage: Whole Group Activity:

Day 1- Hold up two pieces of Spruce (included in kit). Explain, "These wood pieces are from a spruce tree. I am going to soak one of the pieces in water and we'll leave the other one out. Before we soak the wood lets record some measurements. First, let's weigh the spruce"(take out scale and weigh spruce) Circle the number and say it aloud on the hundreds chart. Write it down "This is how much the spruce weighs, how heavy it is." Next take the wood moisture tester and insert probes into the wood. Read the number aloud. "This tool measures how much water is inside the spruce now". Circle that number on the hundreds chart and write it down. "We will compare both of them throughout the week. What do you think might change in the wood that we soak into the water?" Listen and record predictions. Leave both pieces of wood in classroom. Create a graph to record daily observations.

Explore:

Day 2- Take out the piece of spruce that has been soaking overnight. Pass around for students to feel and compare the wood soaked and the wood that was left out. Ask "What is the same? What is different about the wood from yesterday?" "Let's see if the numbers are the same as yesterday, what do you guys think?" (Listen to answers). Review numbers from yesterday on the hundreds chart regarding weight and moisture content. Take out scale, "Let's weigh this wood piece." Weigh wood piece and record answer. (Maybe record in a different color marker for easy visualization). Compare the numbers. Is it more or less? Next, take the moisture tester and stick into the piece of wood that has been soaking in water. Tell students, "Yesterday when we used our moisture tester it read _____ (number) Let's test it now to see what it is." Take moisture tester and stick probe into wood. Read the number and record on the hundreds chart. Compare. Is it the same? Different?

Explain: Talking, Niugtuk, Qalarte, Qenax

"Dry wood like this (Show spruce that is dry) is good for burning in the steam bath or in your home to keep you warm. See how it is lighter in color, lighter in weight and its moisture has a lower number? That means that it is good for fires."

"New wood or wood that has been exposed to a lot of water from rain or in the lake or rivers often soaks up a lot of water. It becomes heavy and has a lot of moisture. This wood is hard to light and won't burn very easily. It takes experience to learn by looking at wood if it is dry or wet. When you are outside see if you can tell if wood is wet or dry. Ask someone you know that collects wood how they know if wood is wet or dry. You can bring in pieces of wood for us to check with our moisture tester."

Evaluation

Emerging:

Students did not participate.

Developing:

Student was not able to tell differences between wood pieces.

Proficient:

Student is able to identify the wood by name and tell how soaking it in water changed either its weight or moisture content.

Advanced:

Student can identify wood, verbally explain how soaked wood compares to dry wood and either asks someone about how they can tell if wood is wet or dry or brings in a piece of wood to be tested.