

Tree Identification Lab Fall/Spring

(Sample 8th Grade Science Lesson infused with Indian Education for All. Prepared by: Everall Fox, Indian Education Specialist, Office of Public Instruction. February 16, 2005)

Montana Benchmarks for Content and Performance Standards Met: 8th Grade Science.

- Science Content Standard 1 (c) communicate and defend results of investigations, and questions results of investigations if different from predicted.
- Science Content Standard 2 (a) examine, describe, compare and classify objects and substances based on common physical properties and simple chemical properties.
- Science Content Standard 3 (e) use a basic classification scheme to identify local plants and animals.
- Advanced Science Performance Standard (c) uses supporting details to thoughtfully and thoroughly explain the physical world (e) independently and confidently identifies and classifies organisms using common classification schemes.

Objectives:

- To observe fall foliage
- To differentiate between different types of trees
- To use a tree guide

Data: (Be sure to leave room in notebook for sketches & information)

Figure 1: Shape of tree / Sketch & Describe

Figure 2: Twigs / Sketch & Describe

- Slender _____ Fat _____
- Color _____ Texture _____

Figure 3: Buds:

- Shape
- Color
- Alternate _____ Opposite _____ Whorled _____
- Other Information

Figure 4 : Leaves (Circle type) Information and Rubbing

- Lobed Unlobed Toothed
- Simple or Compound
- Alternate Opposite Whorled
- Color _____ Texture _____
- Rubbing:

- ✓ The White Clay ate the berries from the Rocky Mountain juniper whole as a cure for asthma.
- ✓ The Lodgepole pine tree was and is still used by Montana tribes for teepees.
- ✓ Willows are used in the construction of sweat lodges used by many tribes in Montana.
- ✓ Wood from a variety of trees were used to construct bows and arrows for tribes in Montana.
- ✓ Trees were hollowed out and used to build canoes with as well.

Uses of trees by other tribes in the US

- ✓ Tribes living near the Sierras (Washoe, Shoshone and Paiutes) use pine nuts as a source of food. They are roasted and eaten, or ground up into flour and used in soups and other dishes.
- ✓ Tribes of the Eastern Woodlands (Iroquois Confederacy), used trees to construct their homes, called, "longhouses". Tribes of this region also harvested maple syrup from maple trees.
- ✓ Tribes of the Northwest Coast (Coast Salish, Tlingit and Haida) used trees to construct totem poles.

Conclusion: 2-3 sentences on what you learned