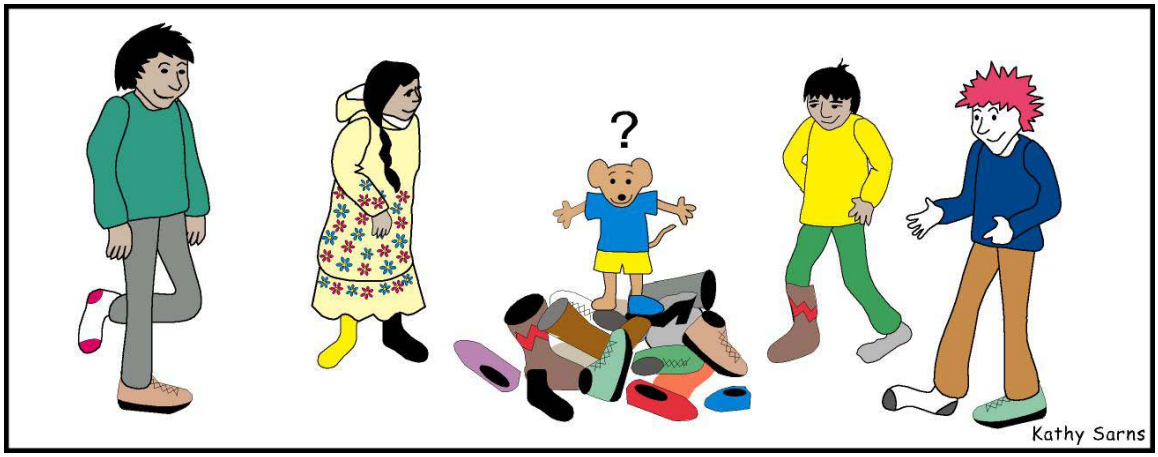
IDENTIFYING OBJECTS



Grade Level: 3-8
Alaska State Content Standards: SA15
Subject: Science
Skills: Classification
Duration: 1 class period
Group Size: whole group and 2-4
Setting: indoors
Vocabulary: dichotomous key

OBJECTIVE
The students will use a dichotomous key to identify local trees.

TEACHING STRATEGY
The students will participate in a variety of activities that help them to understand a dichotomous key.

MATERIALS
- Examples of tree leaves from the area (leaves or twigs)
- Plant Key
  Summer
  Winter

ADVANCED PREPARATION
Familiarize yourself with dichotomous keys. A **dichotomous key** is a classification / identification tool that continually divides the characteristics of objects to be

identified into two branches or parts until all are identified. Look at the "Alaska Trees and Shrubs" identification guide (see Role of Fire Kit) for an example of a working dichotomous key.

PROCEDURE
1. Divide students into groups of 7-8. Have them stand or sit in a circle. Each should take off one shoe and put it in a pile in the center of the circle.

2. Have students divide the eight shoes or other objects into two piles, according to any criteria they wish (color, style, shape, etc). For younger students the teacher may want to model this first. Next divide each pile into two piles according to a specific criteria written by the students. Continue dividing the shoes until they have only one shoe in each pile.

3. Explain a **dichotomous key**. Draw a diagram on the board of the dichotomous key that was created here to identify the names of shoes.

4. Choose a shoe that was not used in the creating the key. Using the key on the board to identify it.

5. Again, review that these are dichotomous keys. Scientists use them out in the field to identify plants.

6. Divide the class into teams of 2-4. Give each group a Plant Key and some tree leaves from the area. Have students identify the trees using the key.

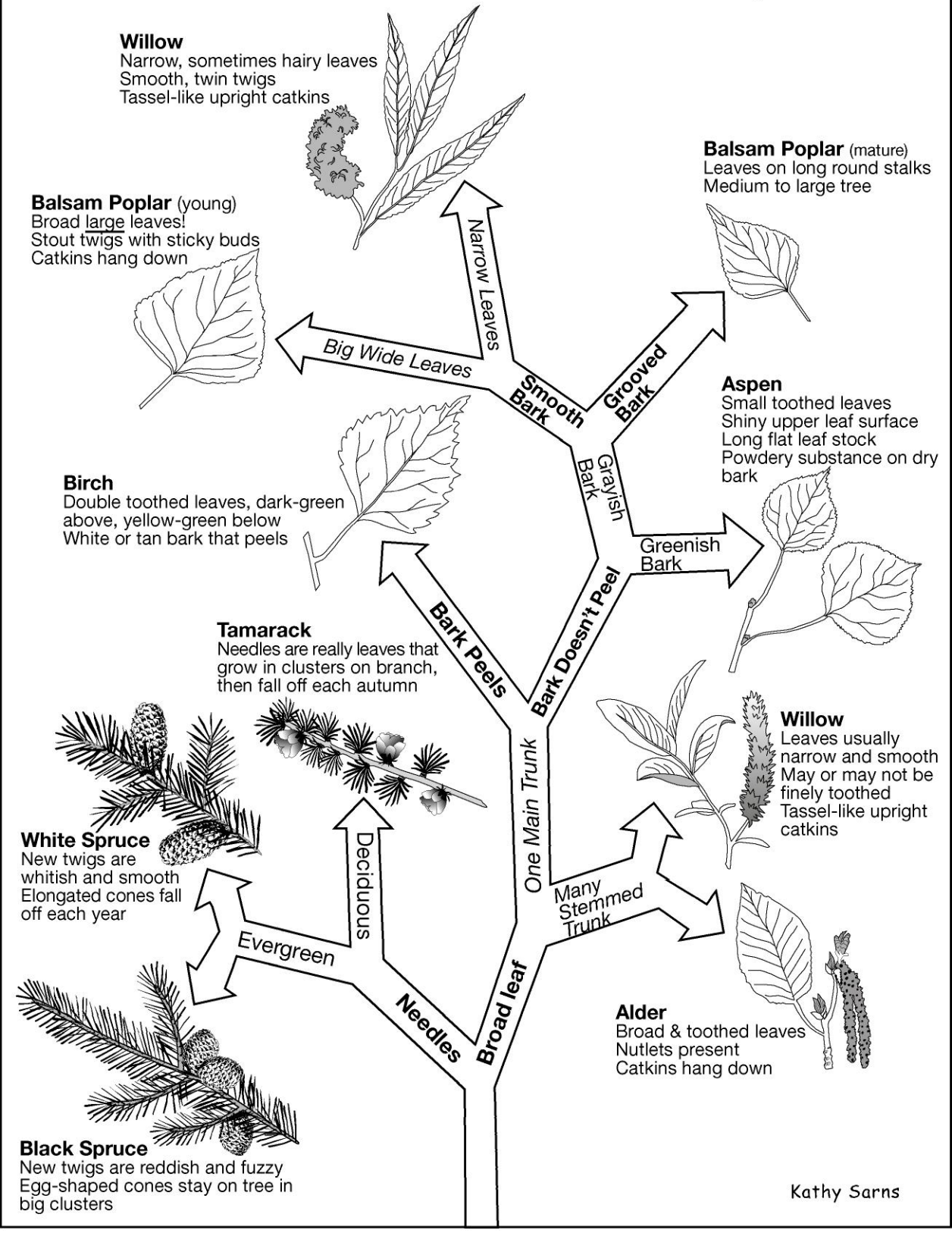
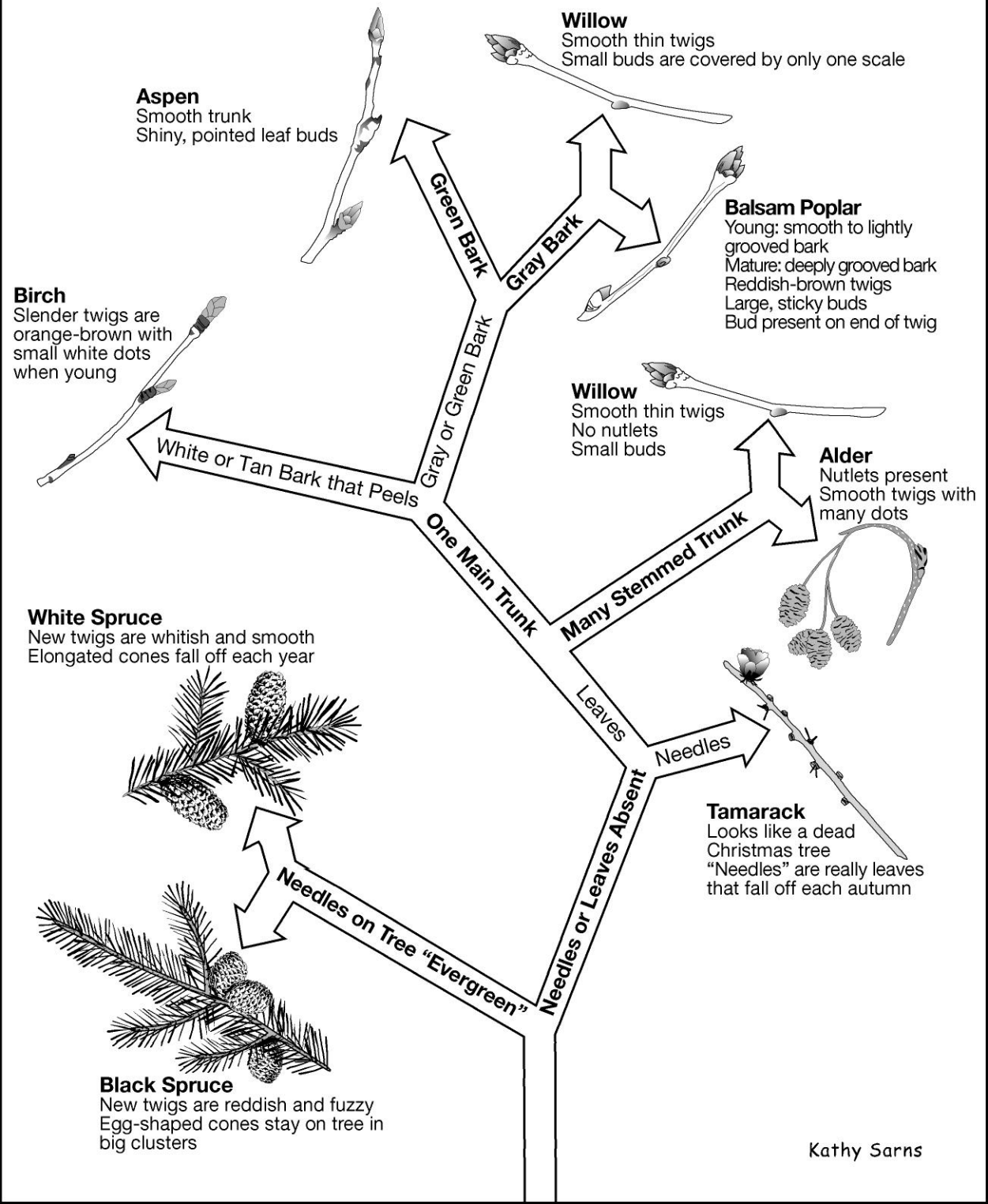
EXTENSION

Do the same activity as above using the Winter Plant Key. Bring in twigs, branches and cones or take your students on a winter plant hike!

EVALUATION

Give each student at least 10 different leaves. Using the Plant Key, the student successfully identifies as least 5 plants from the sample of leaves.

Dichotomous Summer Plant Key



Dichotomous Winter Plant Key