

Gin Xiláa

PLANTS

Grade Levels K-2



A series of elementary level thematic units featuring Haida language, culture and history were developed in Ketchikan and Hydaburg, Alaska in 2004-6. The project was funded by the U.S. Department of Education, Haida Language Immersion Program - Boosting Academic Achievement grant #S356A030046, awarded to the Sealaska Heritage Institute.

Lessons and units were written by a team including Jordan Lachler, project director and linguist specializing in documenting and revitalizing Native American languages. Lachler heads up the local field office of the Sealaska Heritage Institute in Ketchikan. Cherylyn Holter (T'áaw Kúns) grew up in Hydaburg, raised by her grandparents, Willis and Hazel Bell and has worked with the remaining fluent Haida Elders for years. She taught the Haida language to students since returning to Hydaburg in 1990. Linda Schrack (Skil Jáadei) grew up in Ketchikan, spending a great deal of time with her grandparents, Robert and Nora Cogo. She worked for many years in the field of early childhood education, and is an accomplished Native artist and traditional Haida dance group leader. Julie Folta, a cultural curriculum specialist with years of experience developing and teaching thematic, child-centered curriculum in rural Alaska also contributed to lessons and Annie Calkins edited final drafts of the units.

All units are available online at sealaskaheritage.org.



Sealaska Heritage Institute

Teacher Resources

The contents of this curriculum were developed under the Haida Language Immersion Program: Boosting Academic Achievement (2005) grant from the U.S. Department of Education. However, the contents do not necessarily represent the policy of the Dept. of Education and you should not assume endorsement by the Federal Government

Stla
K'íist'aa

Chocolate
Lily

Xíl Kagan

Hudson Bay
Tea

Xíid
Ts'aaláay

Silverweed

Ts'íihlanjaaw

Devil's Club

Hlk'íid

Wild Celery

Gudángaal

**Stinging
Nettle**

K'únhl

Rosehips

Hlgún

**Skunk
Cabbage**

Scientist _____

Inside a Seed

1. Describe your dry seed. _____

2. Measure your seed.

Seed	Unit of Measure
Length	
Width	

3. Soak your seed in a cup of water overnight.

How is the wet seed different from the dry seed?

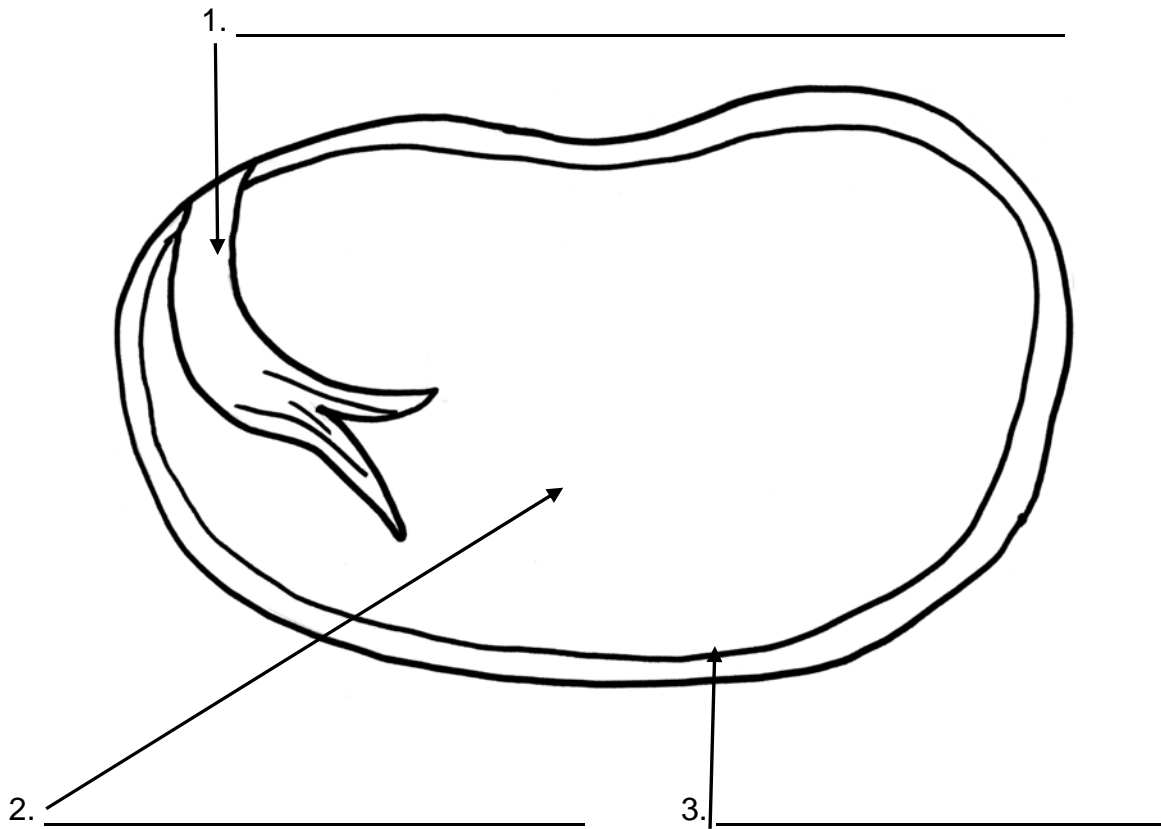
4. Split your seed in half. What does it look like inside? Find the tiny plant called the embryo. _____

5. Why do you think there is so much food stored for the embryo? ____

Scientist _____

Inside A Seed

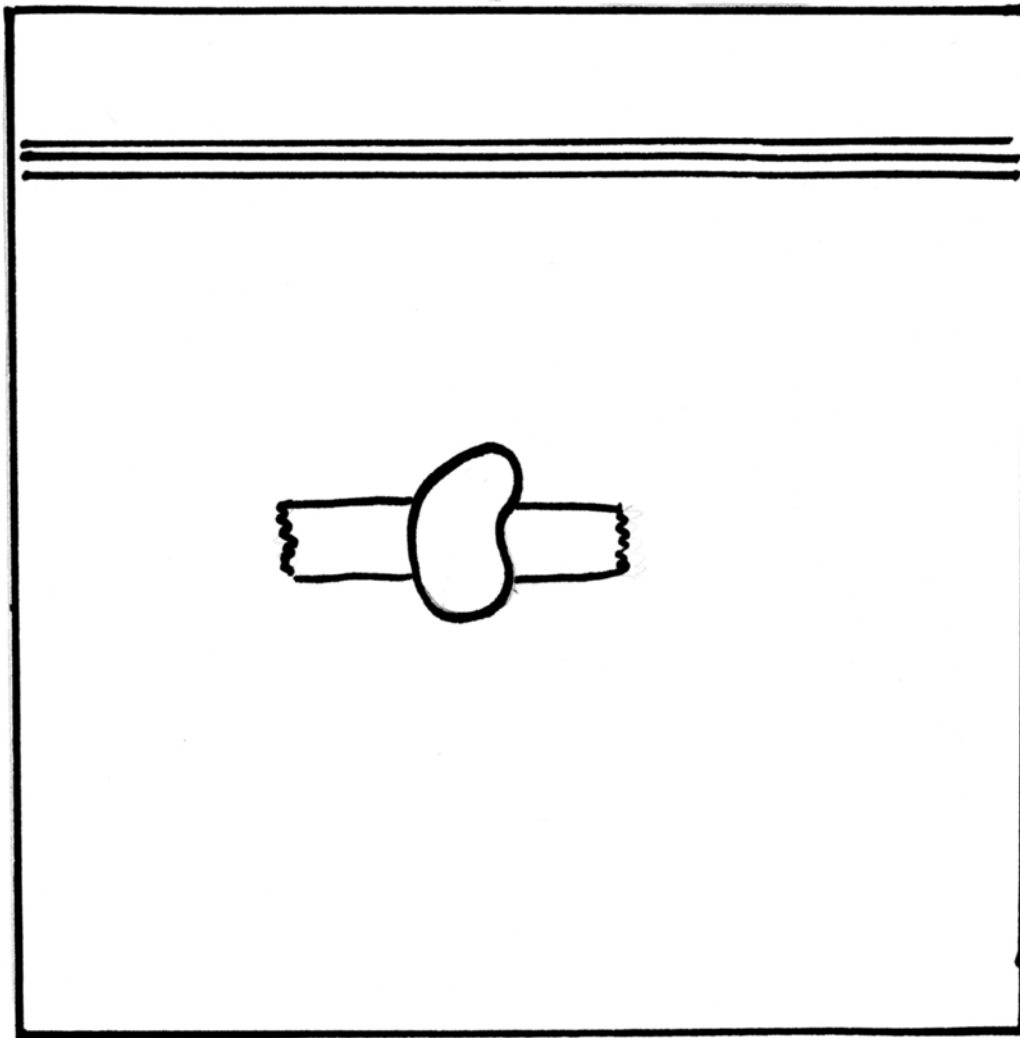
Label the bean plant parts: food storage, seed coat, little plant (embryo).



Scientist _____

A Seed Grows

Tape a lima bean to the inside of a ziplock sandwich bag. Measure the plants growth daily. Use the next page to make your predictions.



Draw your bean plant as it grows.

Scientist _____

A Seed Grows

	Prediction	Actual
1. Will the root or stem sprout first?	_____	_____
2. How many days will it take for the beans to sprout?	_____	_____
3. How many days will it take for the first leaves to grow?	_____	_____
4. How much does the root grow daily?	_____	_____
5. How much does the stem grow daily?	_____	_____
6. What else did you observe about your growing plant?		

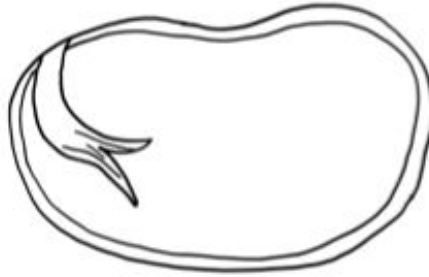
A Plant's Beginnings

Let's plant seeds.

You'll need: Seeds
 Potting soil
 Container
 Plant Beginnings Observation Log

1. Prepare pot and potting soil.
2. Plant your seeds.
3. Keep the soil moist.
4. Make daily drawings and observations in your observation log.

A Plants Beginnings



Observation Log

Name _____


Date _____

Observation Log





Day _____




--	--	--	--	--	--	--	--	--	--	--

Drawing



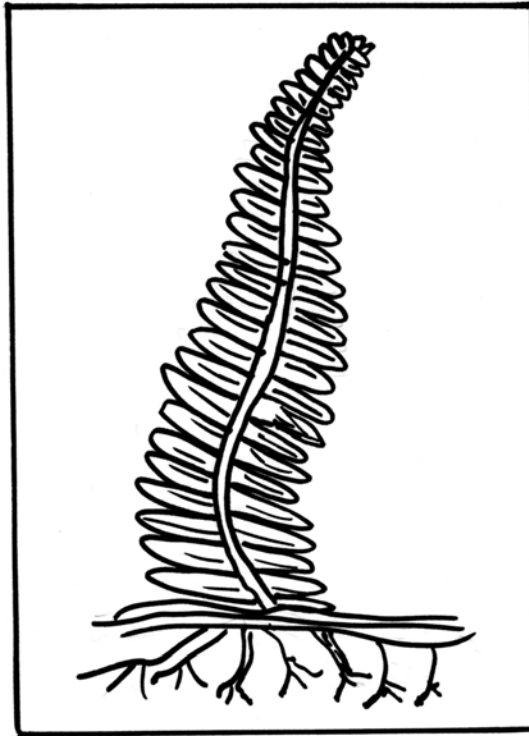
Plant Parts

Plant Part	Haida Name	English Name
	<i>máahl</i>	seed
	<i>hlíing</i>	root
	<i>k'úl</i>	stem
	<i>xíl</i>	leaf

	<p><i>xíl háanaa</i></p>	<p>flower</p>
	<p><i>qáan</i></p>	<p>fruit</p>
	<p><i>stla k'íist'aa ts'áng</i></p>	<p>bulb</p>

Scientist _____

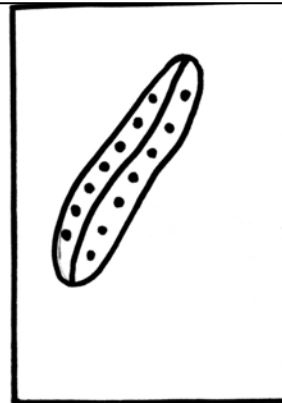
Fern Fronds



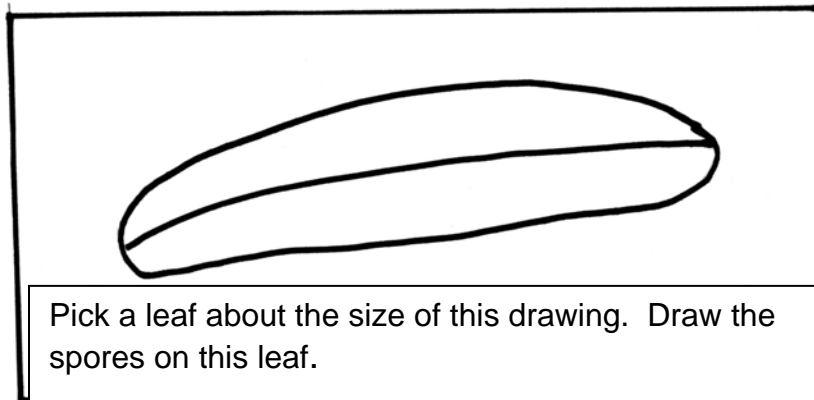
A fern is a green plant that grows from spores not seeds.

Use a hand lens to look at a real fern.

My frond has _____ leaves.



There are _____ spore cases on the above leaf.



Pick a leaf about the size of this drawing. Draw the spores on this leaf.



How We Make Fiddlehead Ferns

We pick the fiddleheads in the spring when they first come up from the fern plant.

We pick off some of the brown fuzz and wash them.

We boil the fiddleheads in water with a little salt until they are soft.

We drain off the water and add a little butter.

Then we eat them. Yummy!

Scientist _____

Root Study

Here's a drawing of my root.

• My root is colored _____.

• My root is _____ cm long and _____ cm wide.

• I could/could not eat this root.

• What do Haida people use roots for? _____

My root is from a

_____.



How We Make Wild Sweet Potatoes

We dig the roots with a pitch fork.

We wash them.

We put them on a roasting stick.

We roast them over the fire.

Then we eat them. Yummy!

Scientist _____

Stem Study

1. Put water in a clear container.
2. Add 3-4 drops of food coloring.
3. Cut the end of the stem.
4. Place the stem in the glass.
5. Leave the stem in the glass overnight.

What happened? _____

Why _____

What stems do Haida people eat? _____

Here's a drawing of my stem.

My stem is from a _____.

Scientist _____

Flower in Water

Here's a drawing of my
flower in water.



Directions

- Pour water in a container.
- Add 3-4 drop of food coloring to water.
- Put a white carnation in the water.
- Leave in water overnight.

How did the flower change? _____

Scientist _____

Observe a Leaf

1. Here's a drawing of the leaf I found in the forest.

1. I found my leaf _____

2. My leaf is _____ cm long and _____ cm wide.

3. My leaf has the colors _____

4. My leaf feels like _____

5. My leaf smells like _____

6. What do Haida people use leaf designs for? _____

Scientist _____

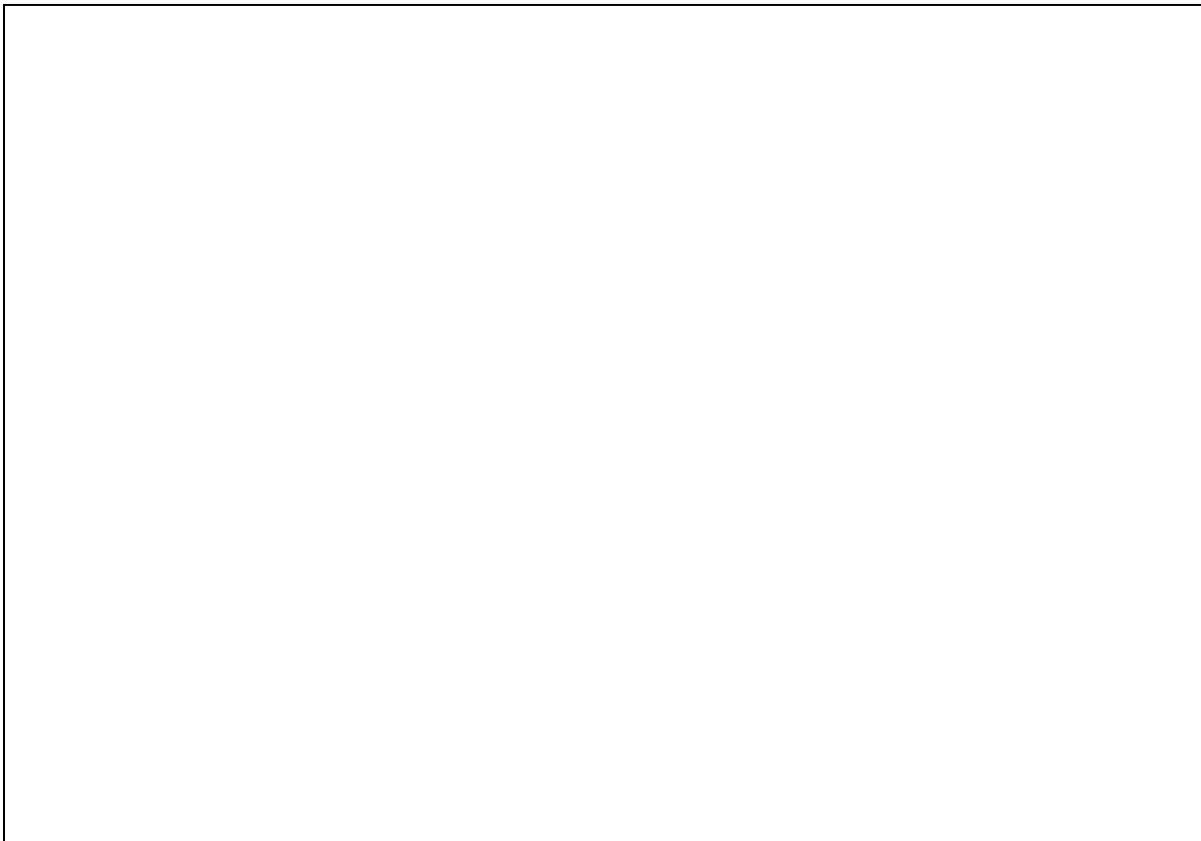
Leaf Tour Guide

I went _____

_____ to gather leaves.

I picked up _____ leaves.

Here's a drawing of my leaf collection.



Scientist _____

Leaf Tour Guide

1. Choose your favorite leaf from you leaf collection.
2. Describe the color and shape of your leaf _____

3. Trace your leaf of the grid below.

4. Leaf length _____ Leaf wide _____ Leaf area _____ squares



How We Make Hudson Bay Tea

We pick the Hudson Bay Tea leaves in the late summer.

We boil them in water for about 5 minutes.

We put the tea through a strainer into a cup and add one spoon of lemon juice and one spoon of honey.

Then we drink it. Yummy!

Scientist _____

Observing Bulbs

Observing Bulbs

Using the wild rice bulb you gather on your field trip use your senses to observe your bulb. Draw and describe what it looks like and how you would prepare it for eating.



Here's a drawing of my bulb.

1. Observation

My bulb is a _____

It looks _____

It smells _____

It feels _____

2. I prepare my bulb for eating by _____

Scientist _____

Flowers

Here's a drawing of the flower
I found in the forest.

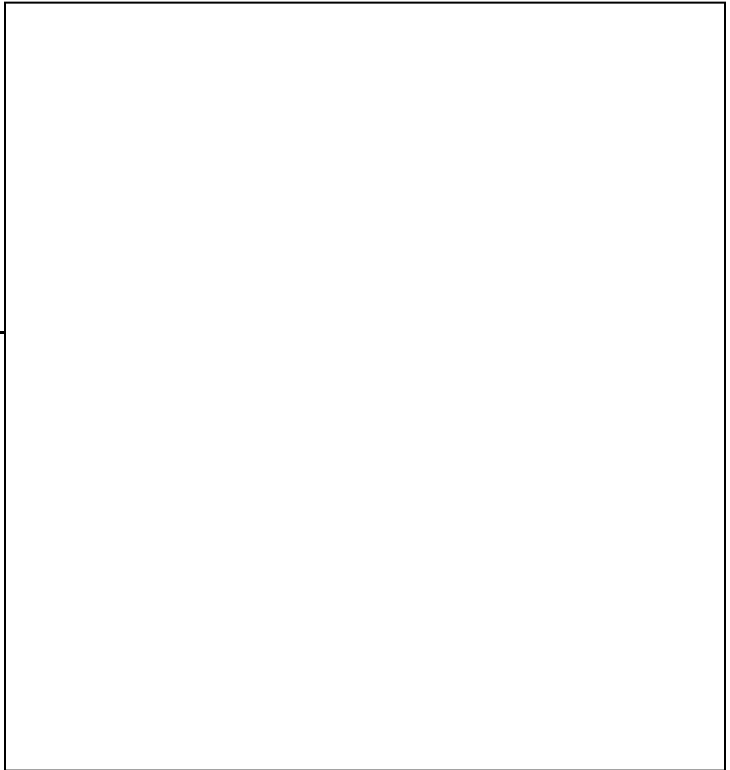
My flower has _____ petals

The petals are colored _____

The center is colored _____

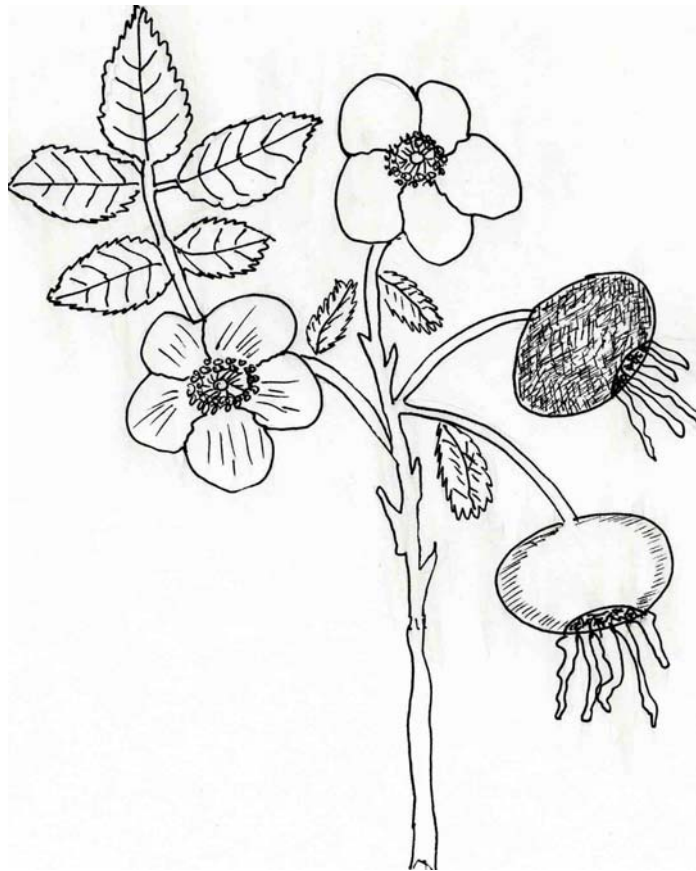
My flower smells like _____

_____.



What are flowers for? _____

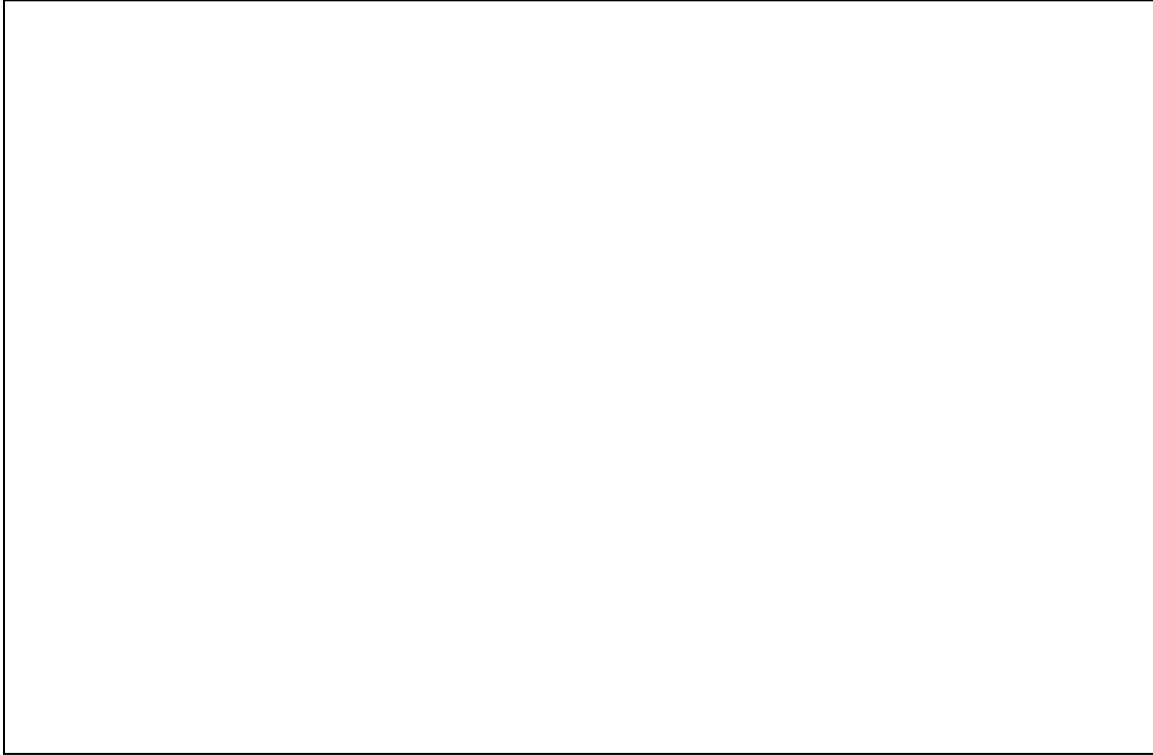
My Plant Study Recipe Book



Name _____

Date _____

Draw the plant.



Write the recipe.

1. _____

2. _____

3. _____

4. _____

5. _____



How We Make Rose Hip Tea

First, we pick rose hips. We pick them when they are red and plump.

We take off the stems and brown, dried sepals.

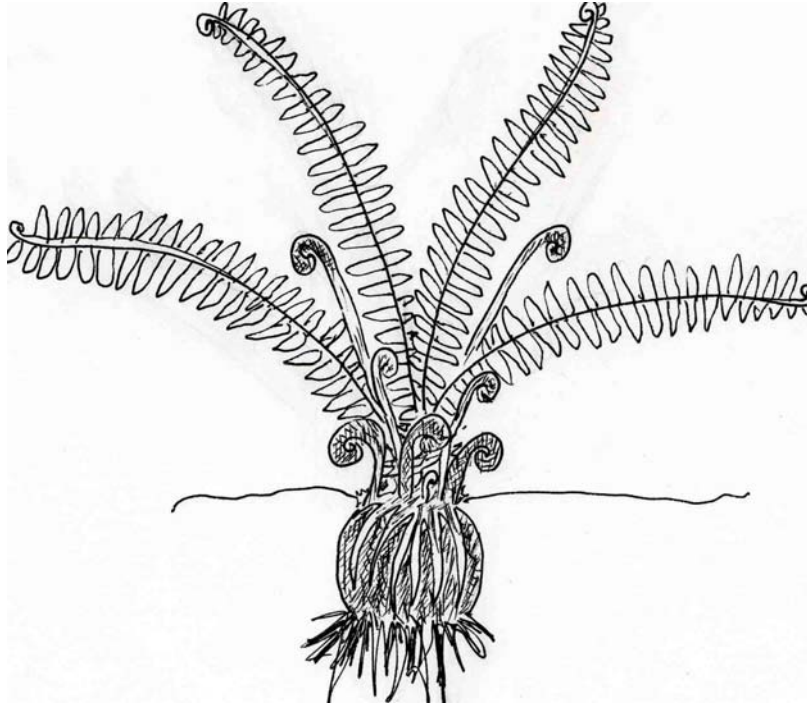
If we want to save the rose hips for the winter, this is when we dry them in the oven with very low heat.

Then we boil the rose hips in water until they are soft. We use about 5 rose hips for each cup of tea.

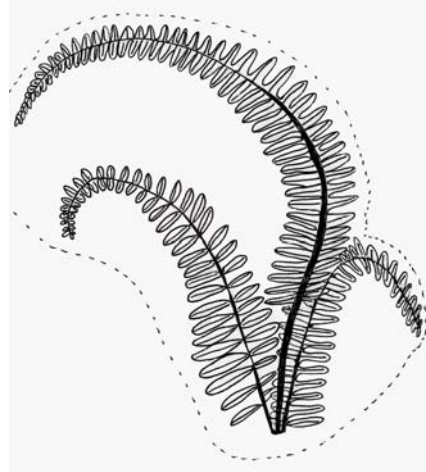
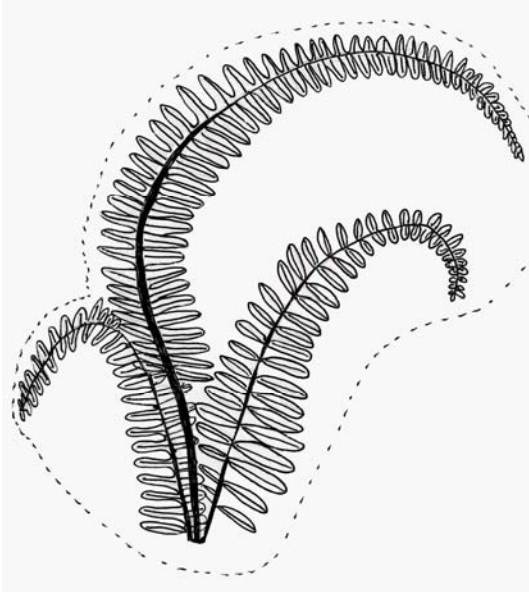
We put the tea through a strainer into a cup and add one spoon of lemon juice and one spoon of honey.

Then we drink it. Yummy!

Fiddlehead Fern

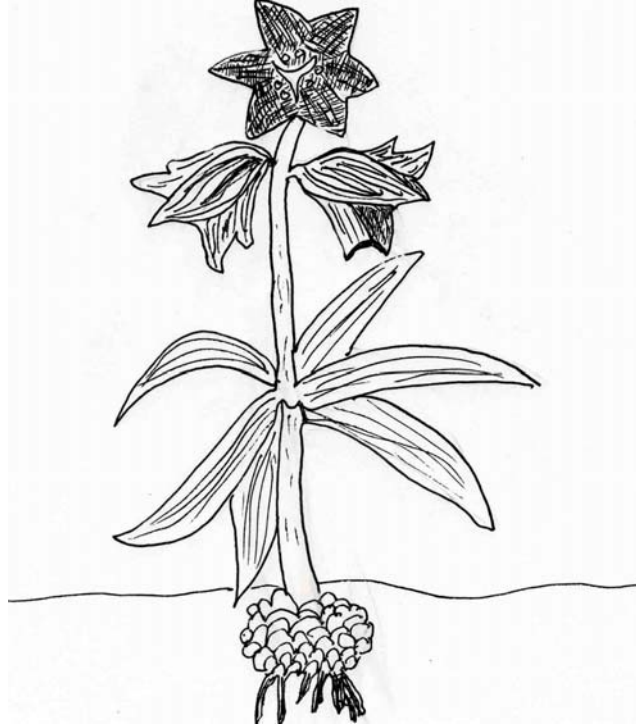


Color and paste the parts to a piece of construction paper to make fiddlehead ferns. Label the parts of your plant. Draw and color the fern's environment.

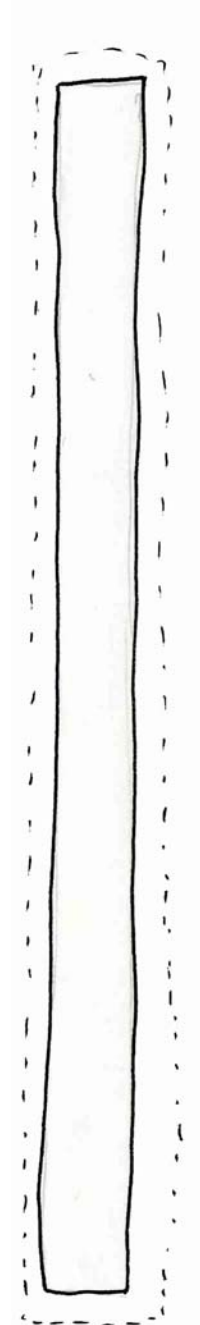
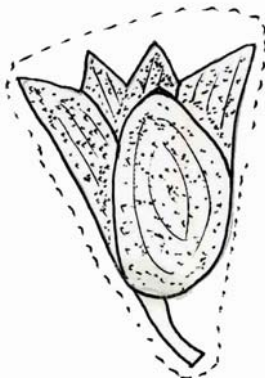
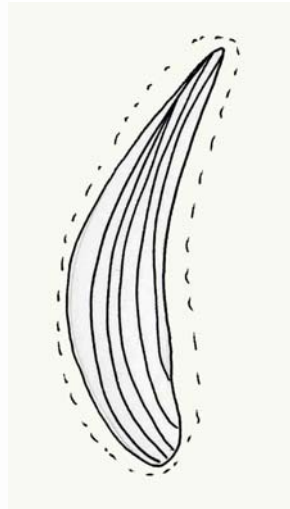
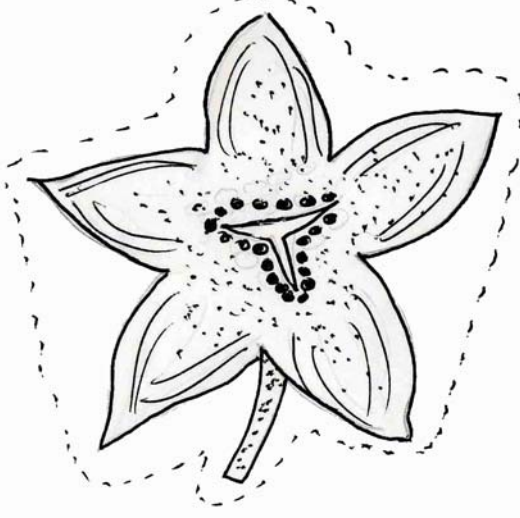
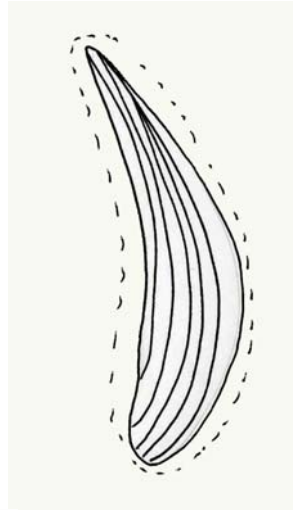
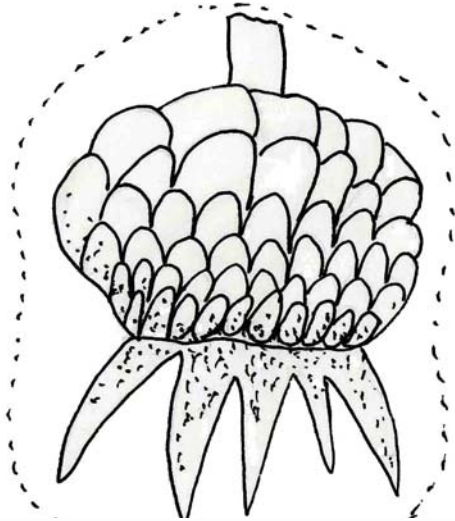


<i>Haida</i>	English
<i>xíl háanaa</i>	flower
<i>k'úl</i>	stem
<i>xíl</i>	leaf
<i>hlíing</i>	root

Stla K'iist'aa - Chocolate Lily

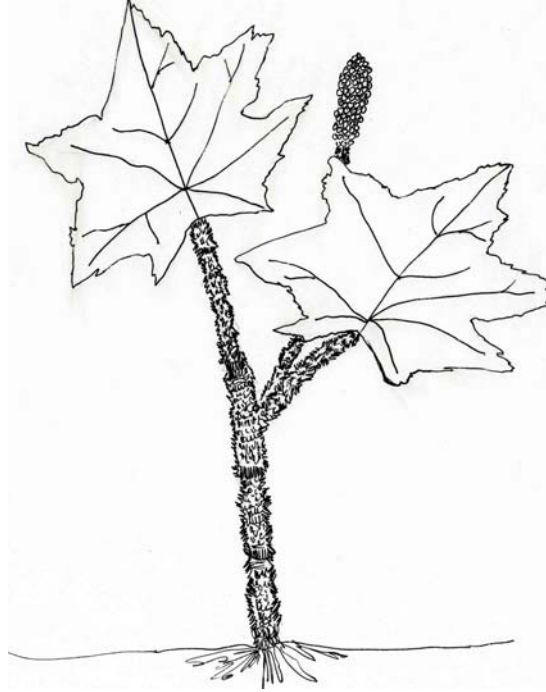


Color and paste the parts to a piece of construction paper to make a chocolate lily. Label the parts of your plant. Draw and color the chocolate lilies surroundings.

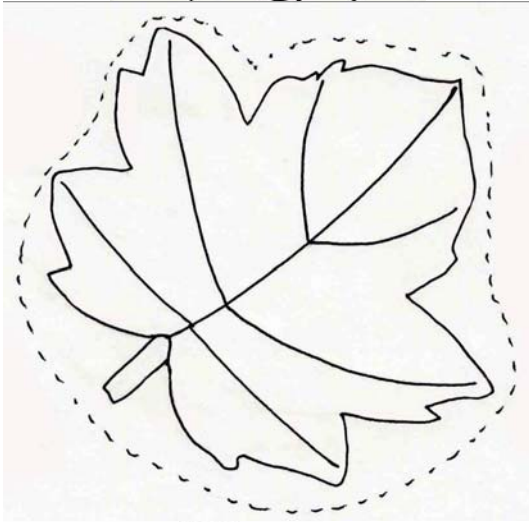
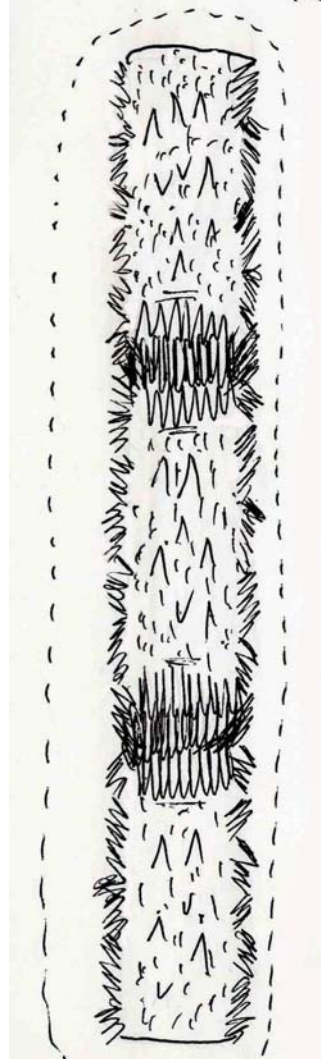
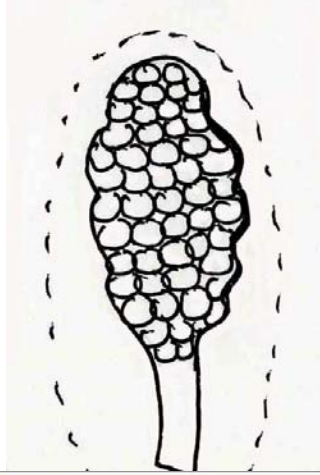


<i>Haida</i>	English
<i>xíl háanaa</i>	flower
<i>k'úl</i>	stem
<i>xíl</i>	leaf
<i>stla k'íist'aa</i>	bulb
<i>ts'áng</i>	

***Ts'íhlanjaaw* – Devil's Club**



Color and paste the parts to a piece of construction paper to make a devil's club.
Label the parts of your plant. Draw and color the devil's club surroundings.

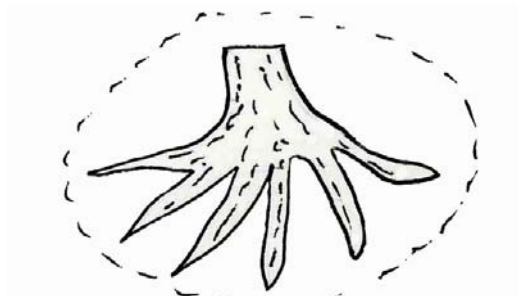
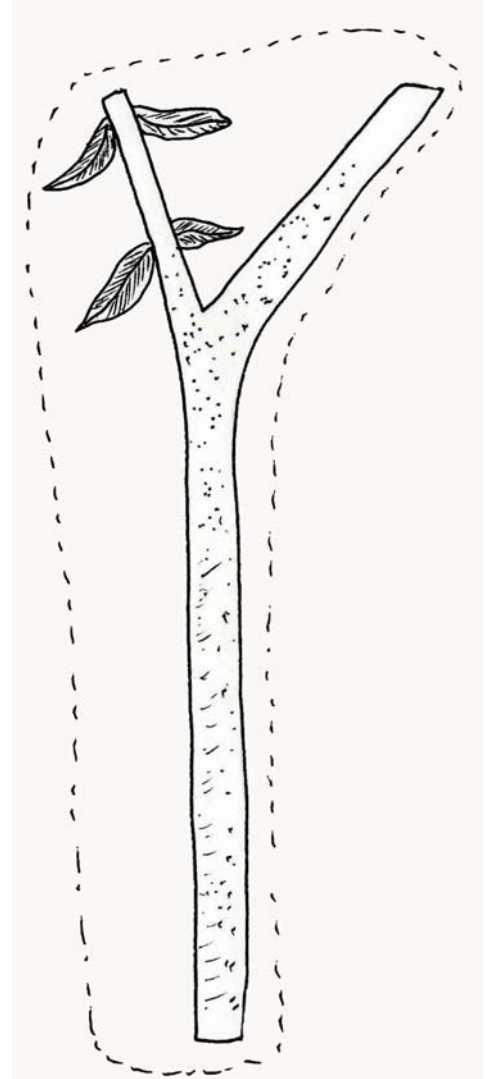
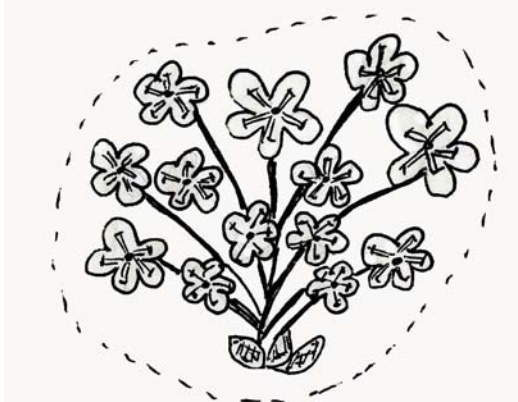


<i>Haida</i>	English
<i>xíl háanaa</i>	flower
<i>k'úl</i>	stem
<i>xíl</i>	leaf
<i>hlíing</i>	root
<i>stlíin</i>	thorn

***Xíl kagan* – Hudson Bay Tea**

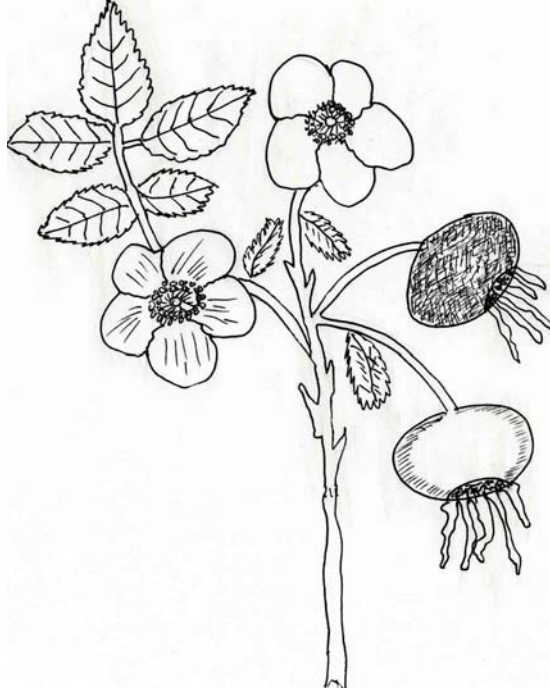


Color and paste the parts to a piece of construction paper to make Hudson's Bay Tea. Label the parts of your plant. Draw and color the devil's club surroundings.

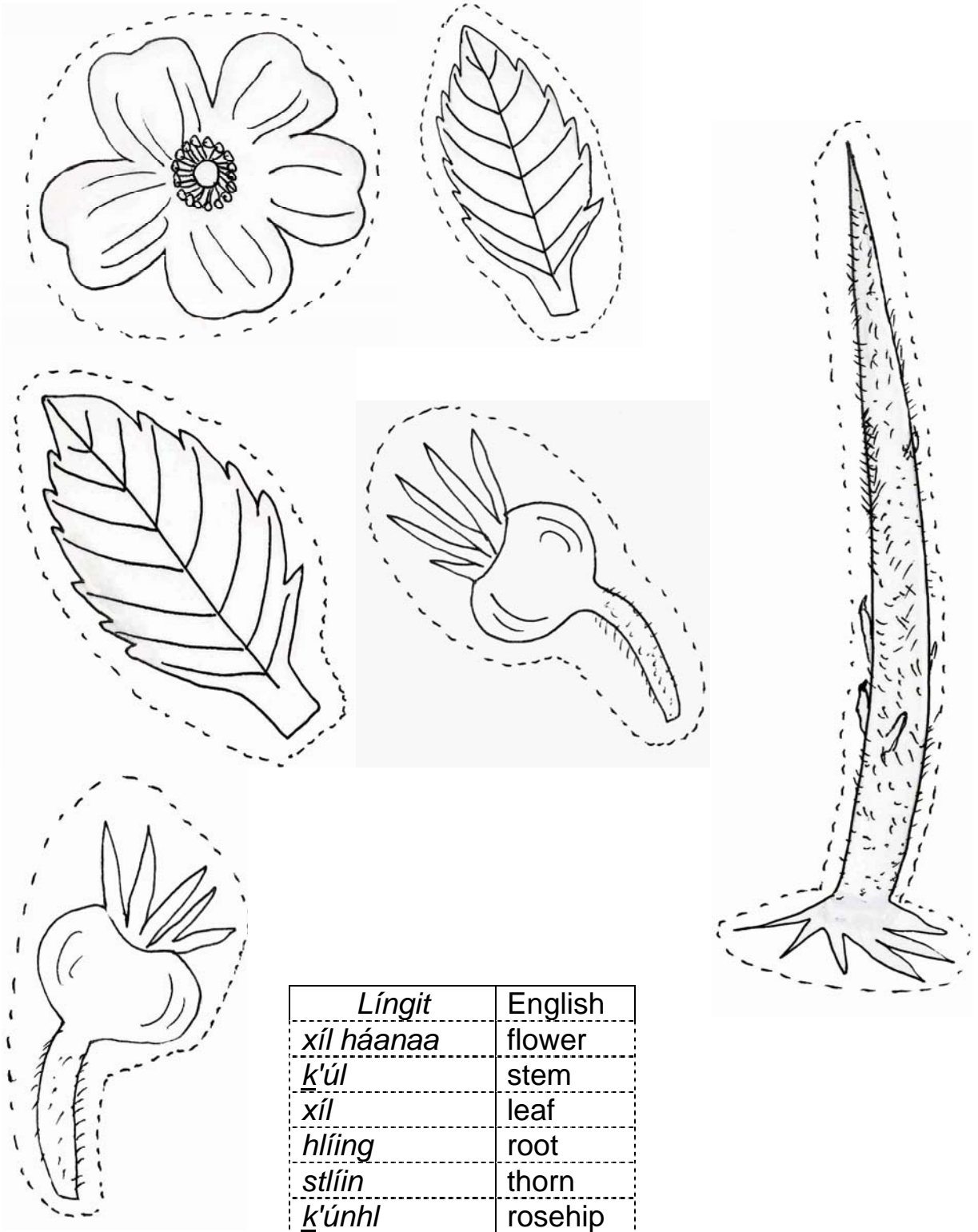


<i>Haida</i>	English
<i>xíl háanaa</i>	flower
<i>k'úl</i>	stem
<i>xíl</i>	leaf
<i>hlíing</i>	root

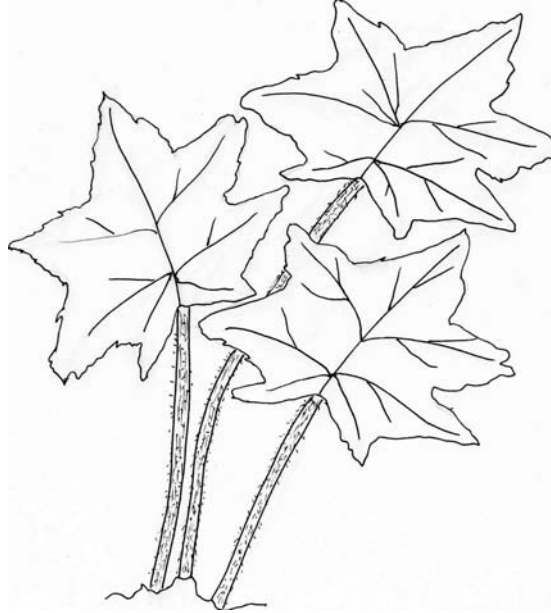
K'únhl – Rosehips



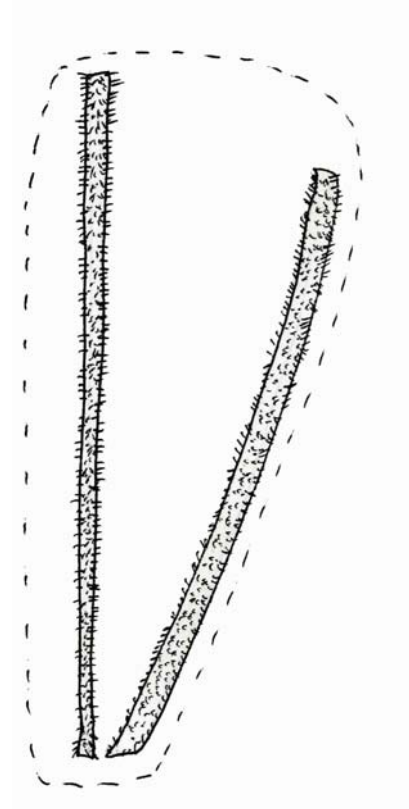
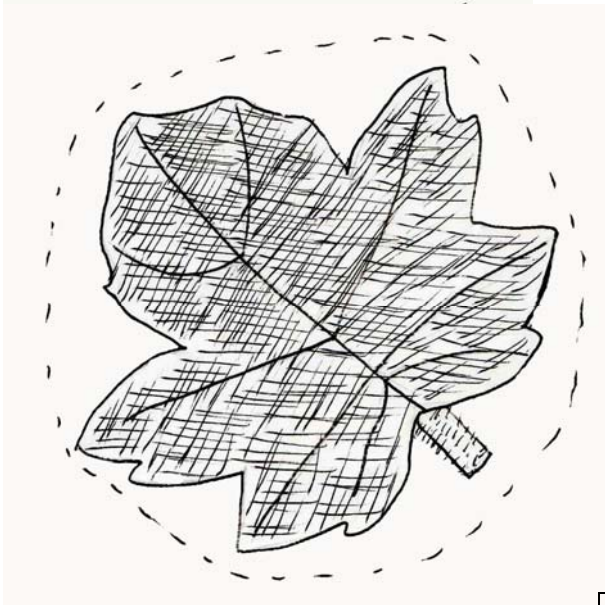
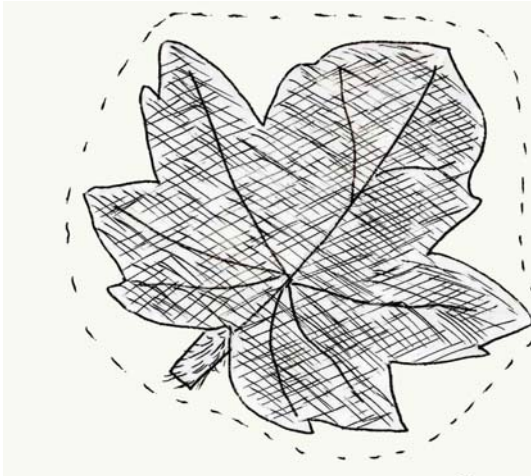
Color and paste the parts to a piece of construction paper to make a rose. Label the parts of your plant. Draw and color the rose surroundings.



***Hik'iid* – Indian Celery**



Color and paste the parts to a piece of construction paper to make Indian Celery. Label the parts of your plant. Draw and color the Indian Celery's environment.



<i>Língit</i>	English
<i>xíl háanaa</i>	flower
<i>k'úl</i>	stem
<i>xíl</i>	leaf
<i>hlíng</i>	roots
<i>stlín</i>	thorn



Stla K'íist'aa Ts'áng
Wild Rice Bulb



Stla K'íist'aa K'úl
Chocolate Lily Stem



Stla K'íist'aa Xíl
Chocolate Lily Leaf



Stla K'íist'aa Xíl Háanaa
Chocolate Lily Flower



Xíl Kagan
Hudson's Bay Tea

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Xíl Kagan K'úl
Hudson Bay Tea Stem



Xíl Kagan Xíl
Hudson bay Tea Leaf

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Xíl Kagan Xíl Háanaa
Hudson Bay Tea Flower



Ts'íihlanjaaw
Devil's Club



***Ts'íhlanjaaw* K'úl**
Devil's Club Stem



Ts'íhlanjaaw Xíl

Devils Club Leaf



Ts'íhlanjaaw Gáan
Devil's Club Berry



Fiddlehead Fern



Fiddlehead Fern Stem



Fiddlehead Fern Leaf



Fiddlehead



Fiddlehead Fern



K'únhl
Rosehips



K'únhl K'úl
Rose Stem



K'únhl Xíl
Rose Leaf



K'únhl Xíl Háanaa
Rose Flower



Hlgún

Skunk Cabbage

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Hlgún Xíl

Skunk Cabbage Leaves

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Hlgún Xíl Háanaa
Skunk Cabbage Flower



Hlk'iid
Indian Celery



Hlk'íid Xíl
Indian Celery Leaves



Hlk'íid Xíl Háanaa
Indian Celery Flowers



Gudángaal
Stinging Nettle

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Gudángaal Xíl Stinging Nettle Leaves

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Xíid Ts'aaláay
Silverweed



Xíid Ts'aaláay Xíl Háanaa
Silverweed Flower



Xíid Ts'aaláay Xíl
Silverweed Leaves