Appendix

Scavenger Hunt Clue Cards

CLUE CARD

1. Locate a wildflower that is knee high

2. The leaves are grass-like and many grow together from the base

3. The flowers are deep blue, and grow in clusters on the same stem

4. You have found **CAMAS**

CLUE CARD

1. Locate a wildflower that waist high

2. The leaves are fernlike and alternate sides up the stalk

3. Flowers are white or pale lilac and grow in sprays with a flattened dome shape

4. You have found **YARROW**

CLUE CARD

1. Locate a tall tree with a straight trunk, and thick, ridge, dark brown bark
2. The needles are flat, yellowish-green, 2-3 cm long and have 2 white bands on the underside
3. The cones are green in spring, and small bracts have 3 points
4. You have found **DOUGLAS-FIR**

CLUE CARD

1. Locate a tree with heavy, crooked limbs, and light grey with thick furrows
2. The leaves are rounded and lobed, shiny dark green on top, and greenish-yellow below
3. The fruits of the tree are acorns
4. You have found **GARRY OAK**

CLUE CARD

1. Locate a shrub that is about as tall as a person
2. The leaves are round or oval, 2-5 cm long, flowers are pink or white in dense clusters
3. White, waxy looking berries grow in clusters
4. You have found **SNOWBERRY**

CLUE CARD

1. Locate a prickly shrub that is about as tall as a person
2. The leaves are oval, 1-7 cm long, flowers are large, and pink at the end of branch tips with a sweet smell
3. Purplish-red “hips” could be seen
4. You have found **NOOTKA ROSE**

CLUE CARD

1. Locate a shrub or small tree taller than a person
2. The leaves are oval with a pointed tip and smooth edges
3. The bell-shaped flowers are greenish-white and grow in clusters that hang down
4. You have found **INDIAN PLUM**

CLUE CARD

1. Locate a shrub that is about as tall as a person, with yellow to red raspberry like berries
2. The leaves grow in 3s, are dark green and sharply toothed
3. Flowers are pink to magenta and about 4 cm across
4. You have found **SALMONBERRY**

CLUE CARD

1. Locate a fern about about waist high
2. The leaves stand up straight and form a crown
3. Central stalk is woody and scaly
4. You have found **SWORD FERN**

CLUE CARD

1. Locate a trailing plant, 50 cm tall. It climbs over other plants, and may have pods
2. The leaves are round and have a curling tendril on the tip
3. Flowers are reddish pink, purple or blue, growing in clusters on the same side of the stem
4. You have found **BEACH PEA**

CLUE CARD

1. Locate a medium height tree red papery bark that peels off
2. The oval leaves are dark and shiny on top, whitish-green below
3. Flowers are white, in large drooping clusters
4. You have found **ARBUTUS**

CLUE CARD

1. Locate a shrub that is about waist high with dusty blue berries

2. The leaves are symmetric and flat, they look like holly but are less prickly

3. Flowers are bright yellow and grow in clusters

4. You have found **OREGON GRAPE**

Scavenger Hunt Information Cards

INFORMATION CARD	**Common camas**
SCIENTIFIC NAME: *Camassia quamash*	**INDIGENOUS NAME:**

ADAPTATIONS: Being so nutritious meant that humans help to cultivate and spread camas. Adaptation through being eaten!

FACTS: Common camas used to grow so densely, people at sea thought they were looking at lakes, not meadows. When cooked properly, common camas tastes like baked pear. Death-camas, with cream-coloured flowers, has identical bulbs and is highly toxic.

NATIVE USES: Common camas is an important food for Coast Salish peoples. The bulbs are highly nutritious and were eaten whenever available. Controlled burning and clearing of weeds and stones were used to help maintain and establish common camas beds. Common camas must be properly cooked to improve the taste and digestibility.

GROWING FACTORS: Common camas grows on grassy slopes and in meadows. It is associated with Garry oak ecosystems.

INFORMATION CARD	Yarrow
SCIENTIFIC NAME: *Achillea millefolium*	**HULKEMEL'EM NAME:** tl'uleqw'ulhp (Down river); xewuqel ('carrotlike') (Upriver)

ADAPTATIONS: Yarrow can grow in a variety of places because of its ability to adapt through root growth to various moisture conditions and multiply rapidly.

FACTS: Yarrow was introduced to this area by early colonists but became highly valued for its many uses.

NATIVE USES: Yarrow is a widely used medicinal plant used for wounds, respiratory illness, and digestive problems. Steaming leaves or chewing leaves is a treatment for headaches. Stalks were used for drying butter clams by the Coast Salish peoples.

GROWING FACTORS: Yarrow grows in areas that range from grassy areas, meadows, on edges and by roadsides. It can grow in wet to dry areas

INFORMATION CARD	Snowberry
SCIENTIFIC NAME: *Symphoricarpos albus*	**ISLAND HULKEMEL'EM NAME:** lila'- fruit (upriver/downriver); lila'ulhp- bush

ADAPTATIONS: Snowberries are eaten by many animals, especially birds who disperse the seeds through their feces after eating. It also reproduces by sprouting new stalks from its roots and rhizomes. It can grow in areas from full sun to partial shade

FACTS:

NATIVE USES: The berries are generally inedible for humans and can cause vomiting, but sometimes 1 or 2 were eaten by the Stl'atl'imx peoples to settle upset stomachs. The berries were used as soap, and the wood can be used for arrow shafts.

GROWING FACTORS: Snowberry grows in dry to moist, open forests, thickets, rocky slopes, riverbanks, ravines or on beaches.

INFORMATION CARD	**Salmonberry**
SCIENTIFIC NAME: *Rubus spectabilis*	**ISLAND HULKEMEL'EM NAME:** lila'- fruit (upriver/downriver); lila'ulhp- bush

ADAPTATIONS: Salmonberry is very good at establishing in disturbed areas.

FACTS: Salmonberry can grow in thickets of clones, and the tastiness of the berries can vary a lot. Try to spread out when berry picking.

NATIVE USES: Sprouts and berries are eaten by local Indigenous peoples. Nuu-chah-nulth peoples boil the leaves with fish for flavour. Usually the first berries to ripen in the spring, berries can be eaten fresh, and they were served with oolichan grease at feasts. Teas made from the roots stimulate appetite. Leaves were used to make tea for anemia, or dried to cure diarrhea and upset stomach

GROWING FACTORS: Salmonberries are found in many habitats, especially moist and wet areas. It can also be found in open areas, often after disturbance events like avalanches or logging.

INFORMATION CARD	**Sword fern**
SCIENTIFIC NAME: *Polystichum munitum*	**ISLAND AND DOWNRIVER HULKEMEL'EM NAME:** sthxhelum

ADAPTATIONS: Sword fern grows best in close-to-full shade, but can still grow in drier, less nitrogen rich and only part shade.

FACTS: Sword ferns are most abundant in forest understories, and on riverbeds, where they can access a continuous flow of nutrients.

NATIVE USES: Almost every part of sword ferns is used by local Indigenous peoples. Fronds can be used as bedding or to wipe slime off fish, or chewed for sore throat. Rhizomes can be dug up and eaten as food or medicine. Fronds are non-stick so can be used under drying berries or to line pit cooks.

GROWING FACTORS: Sword ferns thrive in moist, nitrogen rich soil, with full shade.

INFORMATION CARD	**Nootka rose**
SCIENTIFIC NAME: *Rosa nutkana*	**ISLAND HULKEMEL'EM NAME** qel'qulhp

ADAPTATIONS: Nootka rose grows well in difficult conditions such as steep slopes, seasonal flooding, drought conditions. They can handle a range of soil acidity. They are so good at growing in disturbed environments that they can become invasive and choke out other plants.

FACTS: Nootka rose is so good at growing in disturbed environments that it can become invasive and choke out other plants.

NATIVE USES: Indigenous groups have used rose hips to make teas and syrups. They have high levels of vitamin A, C and E to fight illness. Petals, leaves and bark can be made into a tonic. The roots are steamed and made into fishing nets with Western Red cedar roots.

GROWING FACTORS: Nootka rose likes full sun, and moist conditions, but not boggy. It is often found on border habitats like forest edges and shorelines.

INFORMATION CARD	**Indian plum**
SCIENTIFIC NAME: *Omeleria cerasiformis*	**INDIGENOUS NAME**

ADAPTATIONS: Indian plum berries are one of the first tree fruits to ripen in summer, making it appealing to wildlife to eat them and distribute the seeds. Branches that touch the ground can produce roots, and separate, creating clusters of clones.

FACTS: Also called osoberry. Indian plum is one of the first plants to produce leaves and flowers each spring.

NATIVE USES: Fruit, twigs and bark are used for medicinal purposes. The wood is used for small items such as knitting needles, spoons and combs.

GROWING FACTORS: Indian plum grows in dry to moist open woods, on streambanks and in open areas.

INFORMATION CARD	Beach Pea
SCIENTIFIC NAME *Lathyrus japonicus*	**INDIGENOUS NAME**

ADAPTATIONS: Beach pea seeds can grow after floating in sea water for up to five years. This has led to the plant spreading almost worldwide.

FACTS: The seed pods turn black when ripe, earning the name "Raven's canoe" from the Haida

NATIVE USES: The Dena'ina ate beach pea seeds raw, or boiled and preserved in seal oil.

GROWING FACTORS: Beach pea lives on the immediate coast, on sandy beaches and dunes, and in gravel areas amongst driftwood. It is a perennial, meaning it doesn't die at the end of one growing season. This plant likes moist to wet, sandy soil, and lots of sun.

INFORMATION CARD	Oregon grape
SCIENTIFIC NAME: *Mahonia aquifolium*	**HULKEMEL'EM NAME** Suni' ulhp (Downriver/Island), Suliyulp (Upriver)

ADAPTATIONS: Oregon grape is drought resistant and tolerates poor soil. Birds eat the berries and help distribute the seeds.

FACTS: Oregon grape berries resemble grapes but are not closely related to actual grapes.

NATIVE USES: The tart berries are eaten, but are usually mixed with sweeter berries. The bark and roots can be shredded to make bright yellow dye for baskets. Bark and berries are used medicinally.

GROWING FACTORS: Oregon grape grows in dry to moist soils, in open or closed forests and low to middle elevations

INFORMATION CARD	Arbutus
SCIENTIFIC NAME: *Arbutus menziesii*	**INDIGENOUS NAME** qaanlhp (Hul'q'umi'num)
ADAPTATIONS: **FACTS:** Arbutus retains its leaves throughout the year (evergreen). **NATIVE USES:** Arbutus bark and leaves are used medicinally for sore throat, stomach aches, bladder infections, burns and wounds. Inner bark used by WSANEĆ to make dresses. Berries are dried for decorations and the bark is good to make dyes and to use in tanning and curing hides.Arbutus plays an important role in the WSANEĆ flood story. **GROWING FACTORS:** Arbutus grows on dry, sunny, rocky sites, with coarse textured soil. Arbutus is shade and drought intolerant.	

INFORMATION CARD	Douglas-fir
SCIENTIFIC NAME: Pseudotsuga menziesii	**ISLAND HULKEMEL'EM NAME** sleyuhp (Downriver name), c'sey' (Island name)
ADAPTATIONS: Animals such as squirrels, chipmunks, mice, shrews, winter wrens, and crossbills eat Douglas-fir cones and spread the seed across their environment. Their thick bark makes them fire resistant, and new seedlings can establish well after fires on wetter sites. **FACTS:** Douglas-fir wood is highly valuable and it is a major part of B.C.'s logging industry. On the coast, trees can grow to 85 m tall, and live for over 1000 years. **NATIVE USES:** Wood is used as fuel and building and carving material. Boughs were used as bedding. Sap, needles and bark have medicinally uses for colds, injuries and skin issues. Young needles are high in Vitamin C, and can be made into a tea to treat scurvy. Can be used to create wild-sugar. **GROWING FACTORS:** Douglas-fir grows in moist soils and prefers full sun.	

INFORMATION CARD	Garry oak
SCIENTIFIC NAME: Quercus garryana	**ISLAND HULKEMEL'EM NAME** p'xwulhp

ADAPTATIONS: Garry oak is fire-resistant, and grows well after fire.

FACTS: Garry oak is the only native oak species in Western Canada

NATIVE USES: Garry oak meadows are very important to the Coast Salish. Planned burning helped camas to grow in the meadows. Acorns were eaten by the Coast Salish, after soaking to reduce the tannins. Bark is used by WSANEĆ against tuberculosis and many other ailments. The wood was used for fuel, combs and digging sticks.

GROWING FACTORS: Garry oak grows on dry, rocky slopes or bluffs, but sometimes on deep, rich well drained soil.

Scavenger Hunt Photos

Camas

Yarrow

Snowberry

Salmonberry

Sword Fern

Nootka Rose

Indian Plum

Beach Pea

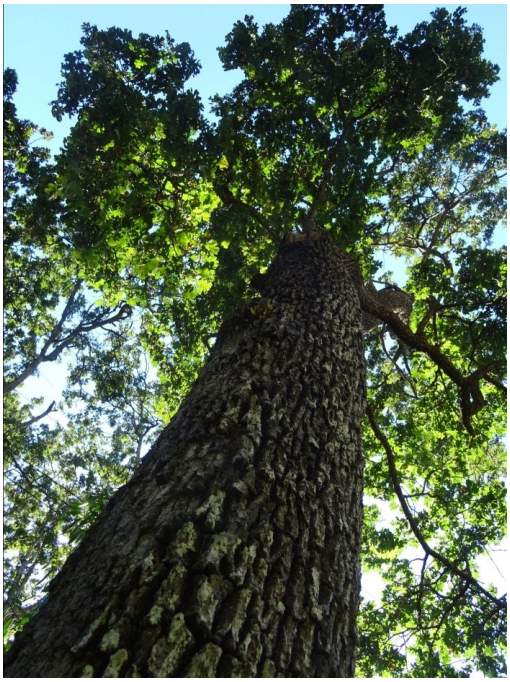
Oregon grape

Arbutus

Douglas fir

Z 

Garry oak



Native Plant Scavenger Hunt

Name: _____ Date: _____

Plant name	Adaptation

My favourite plant I found today was:

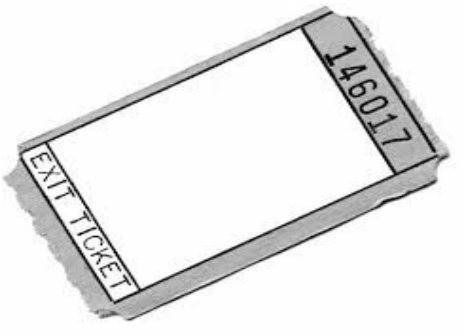
My favourite plant adaptation is:

My wondering about native plants is:

PLANT OBSERVATION SHEET

Plant Common Name: **Plant Scientific Name:**	**Plant's Class Name: (students name the plant something fun)**
Date:	Observations/Predictions (class will decide on criteria to look for on each date)
Date:	
Date:	
Date:	
Date:	

Ticket Out the Door



Name 3 native plant species we talked about today, and state the way at least one of these is/was traditionally used by Indiginous Peoples:

1) _____

2) _____

3) _____

Extension Question: What is the scientific name for one or more of the plants listed above?

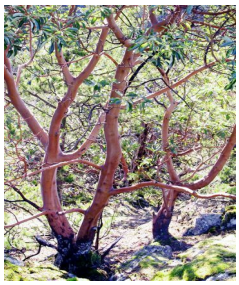
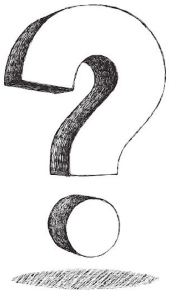
What Can You Do To Help Fight Invasive Species?

a) **Write down what you can do to prevent the spread of invasive species**

b) **Make at least two arguments in favour of your actions**

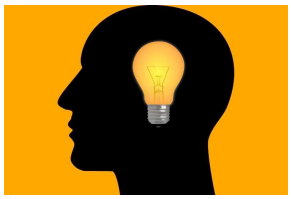
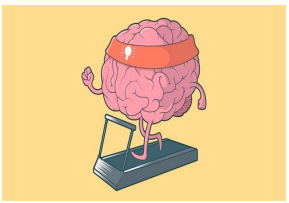
c) **Identify an argument against your action and provide a possible solution**

Native/Invasive Plant Fraction Nature Walk

	What Did You See? (i.e. how many)	Fractions/Equations	Decimals
Native Plants 			
Non-Native Plants 			
Invasive Species 			
Unknown 			

‘Know-Wonder-Learn’ Worksheet

Native and Invasive Plants

TOPIC	Know 	Wonder 	Learn 

MONOGRAPH - PROJECT RUBRIC

Student(s):_____

Category	4 Extending	3 Proficient	2 Developing	1 Emerging
Product	Monograph is exceptionally visually appealing and creative, contains relevant information additional to that which is required, and has excellent spelling, grammar, punctuation, and original content	Monograph is visually appealing, creative, contains a sufficient amount of relevant content, and has good spelling, grammar, and punctuation	Monograph requires some work to add to its visual appeal and level of creativity, is somewhat lacking in relevant content, and has a number of errors related to spelling, grammar, and punctuation	Monograph requires significant improvement to its visual appeal and level of creativity, has very little relevant content, and has a large number of errors related to spelling, grammar, and punctuation
Presentation	Student is totally prepared for the presentation, is able to answer all questions, offers additionally information, and uses body language, tone of voice, and facial expressions that engage the audience and generate their interest	Student is prepared for the presentation, is able to answer most questions, and mostly uses body language, tone of voice, and facial expressions that engage the audience and generate their interest	Student is somewhat prepared for the presentation, is able to answer some questions, but only rarely uses body language, tone of voice, and facial expressions that engage the audience and generate their interest	Student is unprepared for their presentation, is unable to answer most or all questions, and used little to no body language, tone of voice, or facial expressions to engage the audience and generate their interest