Nature Scavenger Hunt – Part 1 5 Senses Challenge

(Check each item off as you find it $\sqrt{}$)

Sight	Sound
- Bird	- Birds
- worm	- Wind
- Squirrel	- Water moving
- Flower	- Leaves crunching
- Colors -green/brown/white/pink	- Animal sounds
Other sights	Other sounds
Touch	Smell - Trees/ leaves/pine needles - A smell you like
- Rocks	- Fresh air
- Mud	- Earth/dirt/mud
- Water	Other smells
- Something green	
- Something soft	
- Something prickly	Taste
- Something smooth	- Something an animal would eat
- Something else	-Something humans could eat



Nature Trivia Questions – Part 1 (Questions #1-10)



(Please note: Answer page can be found on a separate attachment)

- #1- Which bird is the worst walker on land?
 - a) The Snowy Owl
 - b) The Canada Goose
 - c) The Loon
- #2- Which animal relies heavily on acorns for food in the fall?
 - a) Black Bears
 - b) White Tail Deer
 - c) Squirrels
- #3- What living thing migrates over the winter in Mexico travelling up to 4000 kilometers to reach its final destination?
- #4- Why do Monarch Butterflies depend on the Milkweed plant for their survival?
- #5- What is the Aurora Borealis and how is it created?
- #6- What animal has the official status as a symbol or emblem of Canada?
- #7- What is the national tree of Canada?
- #8- What is Canada's national bird?
- #9- What is Quebec's provincial bird?
- #10- When is Earth Day in Canada?



Nature Trivia Questions and Answers–Part 1 (Questions # 1-10)



#1- Which bird is the worst walker on land?

- a) The Snowy Owl
- b) The Canada Goose
- c) The Loon

Answer- c) The Loon (Fun facts: The Loon is an excellent swimmer but has a difficult time walking on land because it's feet are located at the very back end of its body. This is the reason that the Loon often nest and lays their eggs next to the water on the shoreline).

#2- Which animal relies heavily on acorns for food in the fall?

- a) Black Bears
- b) White Tail Deer
- c) Squirrels

Answer- b) White Tail Deer (Fun facts: Deer eat a variety of plants including: fiddle heads, mushrooms, blue berries, grass, woody plants and left over grain piles. However, the Fall when the above plants become more difficult to find the White Tail Deer rely heavily upon acorns).

#3- What living thing migrates over the winter in Mexico travelling up to 4000 kilometers to reach its final destination?

Answer- Monarch Butterflies. (Fun facts: Monarch butterflies are not able to survive the cold winters of Canada, so they migrate each autumn to escape the cold weather. Each fall, millions of monarch butterflies leave their summer breeding grounds in Canada and undertake a great journey of up to 4000 kilometers to their wintering grounds in Mexico. They can fly up to between 1 to 3 kilometers above the Earth's surface in order to take advantage of wind currents).

#4- Why does the Monarch Butterflies depend on the Milkweed plant for their survival?

Answer- Monarch Butterflies cannot survive without milkweed plants because females will only lay their eggs on the milkweed plant leaves. Once the eggs hatch, the caterpillars will only eat milkweed plants. Also, adult monarch butterflies drink the nectar of milkweed flowers for food. This even helps further from being eaten by predators since the milkweed nectar gives them a bad taste.

#5- What is the Aurora Borealis and how is it created?

Answer- The Aurora Borealis is the Northern Lights. (Fun facts: Northern Lights are created when particles of atoms released from the Sun reach the Earth's atmosphere and become charged or burn up. Once the atoms and electrons

from the sun become charged with this high energy at the Earth's atmosphere they can light up the sky with beautiful colors of green, white and red).

#6- What animal has the official status as a symbol or emblem of Canada?

Answer- The Beaver. (Fun facts: The Beaver was chosen and named as the official National symbol of Canada on March 24, 1975. In this case the fur trade was definitely a significant factor in choosing the beaver as an official emblem of Canada. Without the beaver, Canada as we know it, would not exist. Everything changed the moment early explorers realized that beavers have beautiful fur for making clothes. During the 16th century, the fur trade was the backbone of the economy and a major international industry for roughly 300 years. The fur trade was instrumental in the development of the country that would become Canada).

#7- What is the national tree of Canada?

Answer- The Maple Tree. (Fun facts: In 1966 the Maple tree was officially recognized as a National emblem. The Sugar Maple tree leaf is the center piece of the National Flag of Canada and has become the most prominent Canadian symbol nationally and internationally).

#8- What is Canada's national bird?

Answer- The Gray Jay was declared as Canada's national bird in November 2016. (Fun facts: The Gray Jay is also called: The Canada Jay and the Whiskey Jack. The Gray Jay became Canada's national bird after a Canadian wide vote in 2015. It was chosen as Canada's first choice primarily because it is a friendly and social bird which is also hardy since it does not migrate and stays in Canada all year long through our winter months. The Gray Jay also can be found in every province and territory in Canada).

#9- What is Quebec's provincial bird?

Answer- The Snowy Owl was adopted by Quebec as it's provincial bird in 1987. (Fun facts: The beak is nearly covered completely by facial feathers which help them sense nearby objects. Like all owls they swallow small prey whole. Females remain with the young, males bring the food and then females feed it to the owlets. Snowy owls will eat a variety of food including lemmings, Arctic hares, mice, ducks and seabirds. Their feet are covered with feathers, like fluffy slippers. This provides extra insulation for the cold Arctic climate. Male snowy owls are almost completely white, while females are white with dark spots and stripes.

#10- When is Earth Day in Canada?

Answer- Earth Day takes place on April 22nd. (Fun facts: Earth Day is a yearly event celebrated around the world on April 22 to create awareness and to demonstrate support for environmental protection. It was first celebrated in 1970. It now includes events coordinated globally in more than 193 countries. This year Earth Day will be 50 years old and the theme for Earth Day 2020 is climate action and increasing people's awareness on climate change. Climate change represents the biggest challenge to the future of all people, all living things and the world's life-support systems).



The Nature Art Gallery



Objective- To appreciate and find the beauty in nature that surrounds us by creating an art piece with simple items from the natural environment. Participants will use imagination and creativity to make a mini display of natural objects that capture something interesting and beautiful that could be presented in a "Nature Art Gallery". Displays can also include items to show the positive role that they serve to help nature or other living things. For example, a simple leaf or branch can be found beautiful for the colors, shapes, bark and vein patterns, but also, leaves and branches helps nature by making oxygen, shelter for bird nests/insects, and food for animals etc....

Materials- objects from nature, something flat to place items on (shoe box, pie plate, piece of wood, card board, wax paper... etc.), cue card or lined paper.

Method-

- 1- Go outside and look for interesting and special objects from Nature that catch your attention. The list of types of objects that you could find is huge: rocks, sticks, bark, branches, feathers, leaves, moss, dead bugs. seeds, dried flowers, etc... Examine items for their uniqueness of artistic patterns, colors, texture, and shape, etc... Collect as many different items as you can. You may also look for signs of how an object was helpful in nature. For example, a branch with a maze of insect tunnels is artistic but also the branch was a home and food for a family of bugs.
- 2- In order to create a collage or diorama, place the nature objects on a flat surface such as a shoe box, pie plate, piece of wood, wax paper... etc.
- 3- With your imagination and creativity develop an art piece with your favorite objects that could be placed in a "Nature Art Gallery". Arrange them in your own special way to create a design or to tell a story. The chosen display objects could also focus on the purpose they have in nature.
- 4- Write a mini description of your nature art on a cue card or lined paper that will be placed along with the display. There are no limits to what you can write about. It could be a poem, a fictional story, or even a description of why you like these objects and what they mean to you. It could also be a simple reflection of a personal experience that the object helps you to remember. You can also describe the objects from an ecological point of view of how the objects are beneficial and helpful to other living things.
- 5- The Nature Art Gallery is now ready to open. Put your art piece and cue card on display. Share with others!

"Peel the Apple – Share the Apple" (Environmental Education/ Earth Day activity)



Objectives-

- -To learn about the Earth and its' Ozone layer/ the atmosphere/oceans/continents/
- -Discover how much of the Earth is covered in water and land surfaces in numerical values/ratios by using an apple.
- -Make conclusions about the Earth and environment.

Materials: Apples, peelers, cutters, measuring cup or beakers, weights, measuring scales, rulers. Also, if possible have a globe, maps, or an Earth ball as visuals aids for students to use.

Method -

- 1-Bring into class some apples and divide them among the students. Do some math to make some calculations and comparisons.
- 2-Have the students in their groups attempt to peel their apples in one piece. The peel can be used to represent the ozone layer around the Earth which shields it from too much sunlight.
- 3-Measure or weigh the peel and compare it to the size, weight or volume.
- 4-Calculate weight or volume differences to make comparisons. Volume can be calculated by displacing water in a measuring cup or beaker.
- 5-Cut up the remaining apple to show proportions of oceans and continents.

Discussion: Explain and examine how thin the Earth's atmosphere is. The apple skin is not only like the Earth's atmosphere but also, it is like our human skin; the outer layer, which protects all of our inner living organs inside. It also breathes too, letting air in and out. So does the Earth's ozone layer. It breathes and allows gases and sunlight in and out. Living things require the sunlight, but not too much. Humans can get a sunburn or dehydrate. The Sun is 1000 times greater than the Earth (the Earth can be thought of as a little green pea while the Sun is the size of a basketball). The ozone layer allows just the right amount of sunlight to enter for all life to live, to grow, be healthy and survive. Just like the apple, just like our skin!

Pollution and chemicals caused by human activity damage and reduce the delicate ozone layer by making it thinner. As well trapped green house gases and pollution beneath the atmosphere are causing the temperature of the Earth to become too warm.

Questions-The remaining fruit is the earth.

1-Can you make a ratio or fraction statement between the size or amount of peel compared to the size or amount of Earth?

2- Can you do more math by dividing the fruit to show that ¾ of the Earth is oceans? By using fractions cut the fruit to show the oceans and the continents:

 $\frac{3}{4}$ = oceans and water

¹/₄ = continents combined (North America, South America, Antarctica, Africa, Europe, Asia, Australia).

3-How much many more times water is there compared to land masses on Earth? Students could further sub-divide the apple into continents.

Conclusions-

It is easy to see how the peel, continents and land masses are so small compared to the oceans and water.

Draw some conclusions on how vital the ozone layer is and how human actions might be affected.

Then of course, Eat the apple which comes from the Earth! And compost the peels if you can.



Nature Trivia Questions – Part 2 (Questions #11-20)



(Please note: Answer page can be found on a separate attachment)

- #11- What ocean(s) surrounds Canada?
- #12- What is the largest living animal in the world?
- #13- What is the largest carnivore in the world that lives on land?
- #14- Which of the turtles below lays their eggs in the water?
 - a) Snapping turtle
 - b) Painted turtle
 - c) Map turtle
 - d) None of the above
- #15- How do snakes smell?
- #16- Which of the following animals hibernate during the winter?
 - a) Black Bears
 - b) Chipmunks
 - c) Raccoons
 - d) All of the above
- #17- What is the fastest bird in the world?
- #18- Which mosquito bites animals?
 - a) Female mosquitos
 - b) Male mosquitos
 - c) Both female and male will bite
- #19- What statements below about bees is true in how they can help flowers and plants?
 - a) Bees will defend and sting predators that are trying to pick the flowers or fruit.
 - b) Bees will carry and spread the seeds of plants in order to help them reproduce.
 - c) Bees eat spiders and caterpillars which can be harmful to flowers and plants.
 - d) All of the above
 - e) None of the above

#20- Are lady bugs in Canada helpful or harmful to humans?



Nature Trivia Questions and Answers – Part 2 (Questions # 11 -20)



#11- What ocean(s) surrounds Canada?

Answer: Canada is surrounded by 3 oceans: The Pacific, Atlantic and Arctic oceans. (Fun facts: Canada has the world's longest coastline and has one of the largest ocean bodies of any country in the world. The world's oceans produce more than half of the oxygen that sustains life on Earth. Oceans also have a strong ability to absorb carbon dioxide which helps protect all life from the severe impacts of climate change. Oceans are also the main source of protein food for about one billion people around the world. And more than 200 million people fish for a living.

#12- What is the largest living animal in the world?

Answer: The Blue Whale. (Fun facts: Blue Whales can grow up to 30 meters long. They mostly eat krill and copepods which are tiny shrimp like animals. They eat approximately 40 million krill per day which is 3600 kilograms per day or 8000 tons per day. They also eat squid and tiny fish. Blue Whales are found in every ocean in the world except the Arctic Ocean. They are classified as endangered since 1970 and risk of becoming extinct. The greatest threat to Blue Whales is crashing into boats and becoming tangled in fishing nets).

#13- What is the largest carnivore in the world that lives on land?

Answer: The Polar Bear. (Fun Facts: An adult male Polar Bear can weigh between 400 to 600 kilograms (880-1300 lbs.). And males can have a length from nose to tail between 2.4 to 2.6 meters (7-8.5 feet). Polar bears live in countries that ring the Arctic Circle: Canada, Russia, the United States (in Alaska), Greenland and Norway. However, 75% of the Polar Bear population live in Canada. The polar bear's primary food source is seals. If seal hunting isn't going well, polar bears will also eat anything they can find, such as fish, eggs, vegetation, caribou, rodents, birds, berries and human garbage. Polar bear live between 15 to 20 years).

#14- Which of the turtles below lays their eggs in the water?

- a) Snapping turtle
- b) Painted turtle
- c) Map turtle
- d) None of the above

Answer: d) None of the above. Turtles lay their eggs on land. (Fun facts: Turtles are reptiles, like snakes and lizards, but they're more ancient than either of those groups. The first group of turtles appeared over 200 million years ago. Although many turtle species live in the water, all turtles must breathe air and lay eggs on land. If land is not available, they may lay eggs directly in the water. Many young baby sea turtles around the world will undertake multi-year, and epic migrations at sea. However, once the baby sea turtle mature (from 5 to 15 years old) they return to the exact spot where they were born to mate and lay their own eggs. Scientists didn't know how the turtles were able to return to the very spot where they were born. Now a new study has the answer: The turtles

also rely on Earth's magnetic field to find their way home. That's because each part of the coastline has its own magnetic field, which the animals remember and later use as an internal compass).

#15- How do snakes smell?

Answer: Snakes smell best by using their tongues. (Fun facts: Snakes have poor vison and hearing. They rely mostly on their sense of smell to find their way when hunting prey, seeking a mate or determining danger. They have nostrils to breathe with but snakes smell with their tongues. When a snake sticks out its tongue it smells its surroundings. The moist tongue collects scents from small organisms or from whatever it touches and from the air around it. Once the scent particles are picked up from the forks of the snake's tongue they are transferred and processed by organs inside their mouth. These scents are then transmitted to the brain).

#16- Which of the following animals hibernate during the winter?

- a) Black Bears
- b) Chipmunks
- c) Raccoons
- d) All of the above

Answer: d) All of the above. (Fun facts: Hibernation is a deep sleep like behavior that occurs during the cold winter months when little food is available. Not all Canadian animals hibernate for the same amount of time. However, in order to conserve energy many animals will hibernate by having a lower body temperature, slower breathing rate and slower heart rate. Some other animals that hibernate include: groundhogs, bats, turtles, insects, frogs, snakes and skunks).

#17- What is the fastest bird in the world?

Answer: The Peregrine Falcon (Fun facts: It can reach speeds of up to 380 kilometers per hour (240 miles per hour) while diving. Long pointed wings help to direct them as they take these powerful dives to kill their prey which is primarily smaller birds. The peregrine has evolved with a type of nasal covering that diverts the high-pressure air from entering and damaging their lungs. They catch their prey by diving into them in mid-flight. The can stun their prey, knock them out or even kill them by the sudden impact. The Golden Eagle is in second place as the fastest bird by reaching speeds up to 240 kilometers to 320 kilometers per hour (150 to 200 miles per hour) while diving for prey or territorial reasons).

#18- Which mosquito bites animals?

- a) Female mosquitos
- b) Male mosquitos
- c) Both female and male will bite animals

Answer: a) Female mosquitos (Fun facts: Only female mosquitoes bite animals including humans because they need blood, not for food, but to produce eggs. In fact, a mosquito, male or female, can live quite well without biting, just licking sugary substances such as the nectar of flowers. All adult mosquitoes feed on the nectar or honeydew of plants to get sugar, and that provides enough nourishment for both males and females to live, but females also need to produce eggs. To create eggs, females need protein, which they get from the blood of animals).

#19- What statements below about bees are true in how bees can help flowers and plants?

- a) Bees will defend and sting predators that are trying to pick the flowers or fruit.
- b) Bees will carry and spread the seeds of plants in order to help them reproduce.
- c) Bees eat spiders and caterpillars which can be harmful to flowers and plants.
- d) All of the above
- e) None of the above

Answer: e) None of the above. Pollination is the most important thing bees do to help flowers and plants. (Fun facts: Bees benefit flowers and plants by helping the plants to reproduce with pollination. When bees fly from one flower to another in order to collect nectar, pollen is spread from plant to another plant. If pollen from one flower is able to reach another flower of the same species, then that plant will become fertilized. Once fertilized the plant can reproduce, form fruit and seeds which helps so many other living things to survive).

#20- Are lady bugs in Canada helpful or harmful to humans?

Answer: Ladybugs are helpful insects to humans. (Fun facts: Ladybugs are considered as helpful insect to humans because they eat many bugs that are known to eat plants and destroy crops. Not only do adult lady bugs eat crop damaging insects such as aphids, mealybugs and other destructive insect pests but also the adult ladybugs lay their eggs among the aphids so the emerging larvae feed on the insects, too. The blood of a ladybug is yellow and has a very strong smell that acts as a repellent to predators which acts as a defense mechanism).