

Turtle Characteristics

Grade 2 – Science and Technology



Lesson Details

Grade Level:	2	Curriculum Links:	Science and Technology	Time Needed:	30 minutes
Learning Goal	To gain an understanding of how characteristics relate to function, and how living things adapt to their environments.				
Success Criteria	By the end of this lesson, students will understand the characteristics of a turtle. Students will be able to define adaptation and give examples.				
Specific Expectations	<p><i>Understanding Life Systems: Growth and Changes in Animals</i></p> <ul style="list-style-type: none"> Observe and compare the physical characteristics and the behavioural characteristics of a variety of animals, including insects, using student-generated questions and a variety of methods and resources; Identify and describe major physical characteristics of different types of animals; Describe an adaptation as a characteristic body part, shape, or behaviour that helps a plant or animal survive in its environment. 				
Materials Needed	Worksheet (attached), Pencil.				

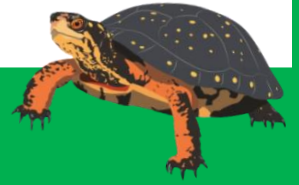
Lesson Description

Overview	Students will learn about the general characteristics of turtles and different adaptations they have in order to survive.
Activity	<ol style="list-style-type: none"> Start by asking the students “how do animals adapt to changing environments?”. Discuss the characteristics of humans – we have thumbs, but some animals do not. Why are thumbs useful to us? Further the discussion by asking the students about the characteristics of a turtle. Why do turtles have shells, but humans don’t? Next, hand out the attached worksheet and have the students independently complete it. You may choose to go over the worksheet as a class once complete.
Background Information	<p>The 8 different turtle species that are native to Ontario share similar characteristics, but the size of these body parts varies depending on the species use for it. For example, the Painted Turtle has a large plastron, allowing them to pull their arms, legs, and head into their shell when scared. But the Snapping Turtle has a small plastron which does not allow for them to pull their limbs in to hide – instead the snapping turtles ‘snaps’ to protect itself.</p> <p>The top shell of a turtle is called a carapace. The underside of a turtle is called a plastron. Many turtles have distinct carapace shapes (high domed like the Blanding’s Turtle) or markings (like spots on the Spotted Turtle) that can be used to identify them. The triangular (or geometric) sections on the carapace are known as scutes. Marginal scutes are found around the carapace and ridges are the nodes (or connections) between them.</p>
Blacklist Masters	<ul style="list-style-type: none"> Worksheet (attached) Video Link(s): Ontario Turtle Identification

Lesson Description

	<ul style="list-style-type: none"> For more information, please visit https://www.turtleguardians.com/sample-page/id-turtles/
Place-Based Learning	Students are encouraged to visit a wetland or other natural area to try to spot the turtles they have learned about in their native environment. Students should try to identify the turtle's characteristics. Which Ontario turtles is local to their community?
Inquiry-Based Learning	<p>Using Guided Inquiry, the students will work independently to complete the workshop and learn about the various characteristics of a turtle, along with adaptations.</p> <p>Ask the students:</p> <ul style="list-style-type: none"> How do animals adapt to changing environments? What body parts on a turtle help it to live within its environment? (E.g. Why does a turtle have a shell? What's the purpose of it?)
Turtle Stories	Try to use different materials to create a turtle based on the characteristics you learned about. Try making a turtle from only recyclables, popsicles sticks, rocks, etc. Students are encouraged to share their experiences, pictures, and worksheets on the Turtle Stories website, found here: https://www.turtlestories.ca/
Turtle Guardian Program Links	In Level 1 (Ontario Turtle Identification) of the Turtle Guardian Program , students will learn how to identify all 8 species of Ontario's turtles. For more information, please visit https://www.turtleguardians.com/what-is-a-turtle-guardian/

My Notes



Turtle Characteristics

Match the Characteristics with the Purpose:

Extra Eyelid	Like a rudder on a boat, helps them to steer when swimming
Long Tail	For swimming fast
Hard Shell	Helps them to see underwater, like built in goggles
Webbed Feet	Protection


Turtles hibernate at the bottom of lakes and large wetlands in the winter. They bury themselves in the mud to keep warm. How do they breathe under the water all winter? The answer below may surprise you!

Word Bank:

Breathe

Hibernate

Bury



We breathe through our butts!
Turtles have special blood vessels that allow us to take oxygen out of the water.

Label the Parts of a Turtle:



Carapace

Scute



Tail



Head



Plastron

Foot

Word Bank:

Head Scute Foot Carapace Plastron Tail

Let's Learn a New Word. Can You Trace:

Adaptation

Adaptation → Features or traits that help living things survive. Giraffe's have long necks to reach leaves that are high up in trees. Just like how a giraffe adapts to reach the leaves, turtles have adaptations too!



Circle the Correct Adaptation:

When a Painted Turtle is scared, it will...

Hide in its shell

OR

Run away

When a Snapping Turtle is scared, it will...

Hide in its shell

OR

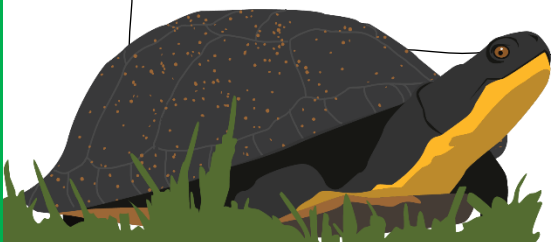
Snap to look scary

A Map Turtle eats clams using...

A powerful jaw with
a thick beak

OR

Rows of sharp
teeth





Turtle Characteristics

Match the Characteristics with the Purpose:

Extra Eyelid

Like a rudder on a boat, helps them to steer when swimming

Long Tail

For swimming fast

Hard Shell

Helps them to see underwater, like built in goggles

Webbed Feet

Protection


Turtles _____ at the bottom of lakes and large wetlands in the winter. They _____ themselves in the mud to keep warm. How do they _____ under the water all winter? The answer below may surprise you!

Word Bank:

Breathe

Hibernate

Bury



We breathe through our butts!
Turtles have special blood vessels that allow us to take oxygen out of the water.

Label the Parts of a Turtle:



Word Bank:

Head Scute Foot Carapace Plastron Tail

Let's Learn a New Word. Can You Trace:

Adaptation

Adaptation → Features or traits that help living things survive. Giraffe's have long necks to reach leaves that are high up in trees. Just like how a giraffe adapts to reach the leaves, turtles have adaptations too!



Circle the Correct Adaptation:

When a Painted Turtle is scared, it will...

Hide in its shell

OR

Run away

When a Snapping Turtle is scared, it will...

Hide in its shell

OR

Snap to look scary

A Map Turtle eats clams using...

A powerful jaw with
a thick beak

OR

Rows of sharp
teeth

