

UNIT FOUR: ETHICS AND CULTURE

Science Expectations met in this unit:

Activity Number:	Strand	Specific Expectations		
Activity Name		Understanding Basic Concepts	Developing Skills of Inquiry, Design and Communication	Relating Science and Technology to the World Outside the School
13: Celebrate Good Times!	Grade 2 – Growth and Changes in Animals			
	Grade 4 – Habitats and Communities			
	Grade 6 – Diversity of Living Things			
	Grade 7 –Interactions Within Ecosystems			
14: How Did You Get That Fabulous Hiding Spot?	Grade 2 – Growth and Changes in Animals	1, 4, 8	3, 4, 5	
	Grade 4 – Habitats and Communities	1, 4, 5	1, 3	
	Grade 6 – Diversity of Living Things		1, 3, 5	
	Grade 7 –Interactions Within Ecosystems		1, 3, 5	
15: To Be or Not to Be	Grade 2 – Growth and Changes in Animals	1, 4, 8	3, 4, 5	
	Grade 4 – Habitats and Communities	1, 4, 5	1, 3	
	Grade 6 – Diversity of Living Things		1, 3, 5	
	Grade 7 –Interactions Within Ecosystems		1, 3, 5	

SECTION ONE: Connections

Introduction

Turtles are found in the myths and legends of numerous cultures. In many of these stories, turtles are portrayed as symbols of strength, stability, benevolence, longevity, and wisdom. These interpretations ascribe to turtles virtues we admire, and describe the variety of roles turtles play in our environment.

Hindu Religion

In the Hindu religion, the turtle is considered to be the second incarnation of the powerful god Vishnu. Vishnu transforms himself into a great turtle after the great floods, which occur every four billion years and result in the dissolution of Earth. On his back, he carries a vessel in which the gods and demons mix the elements necessary to re-create the world. When the Earth has been reborn, the turtle remains in place; on his back stands a large elephant which supports the planet.

Buddhist Faith

Turtles have special significance for those of the Buddhist faith. As symbols of immortality, turtles are thought to be temporary dwelling places for souls making their way through a series of existences on the path to Nirvana.

Chinese Myth and Folklore

Ancient folklore of China depicts the life of Kwei, a dragon turtle. Kwei emerges after the destruction of the world and takes control of the creation of the heavens and earth. He passes his life on to a series of guardian turtles that aid mankind in pursuing truth and wisdom.

Another Chinese myth describes an immense turtle containing the world within his shell. The bottom, flat part of the shell (plastron) contains the oceans and the Earth's floor, whereas the domed upper half (carapace) forms the heavens, including the stars and planets.

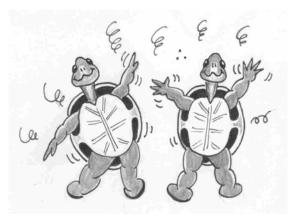
Mayan Legends

The Mayans believed that the turtle brought the rains to make their crops grow.

They also observed turtles survive forest fires unharmed, which led the Mayans to believe that turtles had supernatural survival skills. As a result of these beliefs, turtles were accorded with a special status amongst the people of Central America.

North American First Nations Legends and Myths

North American First Nations have many legends about turtles, including the two that follow (on pages 83 and 86). The first story, "How Turtle's Back Was Cracked," tells the tale of why turtle shells look cracked. The second story is a creation story about how the Earth grew upon a turtle's shell.



ACTIVITY #13: CELEBRATE GOOD TIMES!

TOPIC

How do different cultures relate to the turtle?

BACKGROUND INFORMATION

Students should know about the legends and myths surrounding the mystique of the turtle. For a listing of various cultures refer to Section One: Connections (page 83).

MATERIALS

Student work sheet

METHOD

Students should choose one culture that they want to research and then investigate how the turtle is depicted in this culture.

Teachers can have students choose from one of the following cultures:

Hindu Religion Buddhist Faith Chinese Mayan North American First Nations

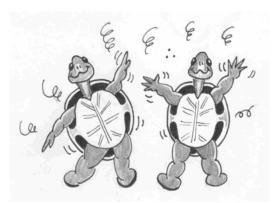
Alternatively, teachers can ask students to choose a non-culturally aligned event in a turtle's life such as turtle nesting season, turtle migration, or emergence from hibernation.

Students will use the information they have gathered to create a holiday celebrating their turtle according to the precepts of the given culture or event. In groups, students will have to decide how the holiday will be celebrated, what types of food would be appropriate, what activities will be held as well as the colours, songs and traditions associated with this event. In addition, students will have to invent a name for the holiday.

EXTENSIONS

Students can create a greeting card to celebrate their holiday. On the front cover of the card, students should draw a picture depicting their legend or myth. On the inside cover, they can include a short summary of the legend. Students can exchange their cards with a classmate.

Have students create their own stories, legends or myths.



ACTIVITY #13:CELEBRATE GOOD TIMES!

Write the name of the culture or event your group has chosen.

If you are using a specific legend or myth, outline it here. You can also include a copy of the legend itself.

Describe how the turtle is depicted in this culture and/or story, or the event in the turtle's life.

Create your own holiday showing how the turtle is depicted in this culture or illustrating this aspect of the turtle's life. Include types of food, activities, colours, songs, and traditions that will be a part of this holiday. Don't forget a name for your holiday!

SECTION 2: Legends of the Fall

This is a Cherokee tale told by Gayle Ross, a direct descendant of Principal Chief John Ross of the Cherokee Nation. Principal Chief Ross led the Cherokee on the Trail of Tears, the U.S. government's forced migration of the Cherokee Nation out of Georgia, bound for resettlement in Oklahoma, in 1838-39. In this tale, the author describes how the back of a turtle was cracked. It displays the wit of the turtle, often considered a wise and intelligent creature.

"How Turtle's Back Was Cracked: A Traditional Cherokee Tale"

This is what the old people told me when I was a child, about the days when the people and the animals still spoke the same language. Now, in those days Possum and Turtle were best friends. Many people thought it odd that two such very different creatures would be so close, but Possum and Turtle knew they had a lot in common. Neither of them liked to go anywhere in a hurry, and they both loved persimmons.

Here is how they shared persimmons together. Possum would climb a persimmon tree, wrap his strong tail around a limb, and hang. Turtle would come and stand as the foot of the tree, and Possum would swing up and pick a persimmon for himself and eat it. Then he would swing up and pick another one, and Turtle would open his mouth as wide as it would go. Possum would take careful aim and drop the persimmon into Turtle's mouth. They could do this for hours.

They were sharing persimmons in this way one day when a wolf came along. The wolf watched the two friends for a while and he saw a way to play what he thought was a pretty funny joke and get a free lunch at the same time.

He went and stood behind Turtle, and when Possum dropped a persimmon, the wolf leaped into the air and snatched it before it could land in Turtle's mouth. When Turtle opened his mouth, he closed his eyes, so he did not see the wolf, all he knew was that he saw Possum drop the persimmon, but it didn't land in his mouth. And after he saw many, many persimmons dropped that he did not eat, Turtle began to get angry.

Possum, up in the tree saw the wolf and realized what was happening. Now if you have a best friend, and you're trying to make a present for him, and someone comes along and steals it, it can make you angry. And that's how it was with Possum. He decided to fix that wolf. He looked all around the tree and found the biggest, ripest persimmon he could find.

Then instead of just dropping the persimmon down to Turtle, he threw it with all the strength he had, and the greedy wolf leaped into the air with his mouth wide open. The persimmon flew down his throat and stuck there, and he choked to death. Possum thought no more about it. He went back to eating persimmons.

When Turtle opened his eyes and saw the dead wolf, he realized where his persimmons had gone. And the more he thought about how the wolf had stolen his food, the angrier he became. He began to scold the wolf saying, "You were a very greedy wolf! You got what you deserved!" Then he said, "Possum and I sure showed you! You won't be stealing any more persimmons." And then, "That was a very brave thing for me to do!" And finally he convinced himself that he alone, Turtle the Mighty Hunter, had slain the greedy wolf.

Now it is a custom for a hunter to take what is called a tribute from an animal he has killed. In this way he captures a piece from the animals spirit, which then belongs to him. Turtle decided he had the right to take a tribute from the dead wolf, so he cut off the wolf's ears. He took them home and fixed them onto two long wooden sticks and made wolf-ear spoons.

In the old days it was another custom to offer a visitor food to eat the very first thing. And there was a special dish that was usually kept cooking at all times just to offer a guest. This was a kind of thick corn soup. Turtle took his wolf-ear spoons and went visiting.

First Turtle visited all his friends. Then he began visiting people he had met once or twice. And then he began to visit people he had not even been introduced to, just so they would offer him a bowl of corn soup, and he could pull out his wolf-ear spoons and eat with them. Pretty soon everyone was talking about what a mighty hunter Turtle must be if he ate corn soup with wolf-ear spoons.

It wasn't long before word got back to the rest of the wolves, and they were angry. This was a terrible insult, for such an insignificant creature as Turtle to be eating corn soup with wolf-ear spoons. The wolves are faster than turtles, and they had no trouble catching Turtle. But then, in the manner of wolves everywhere, they began to argue over what to do with him. Turtle listened, and decided that the only thing he could do would be to keep his wits about him and be ready for any chance that he saw.

Finally one wolf said, "I know what we'll do with you Turtle. We'll build a roaring fire, throw you in it, and burn you alive." Turtle thought very quickly and said, "Oh please do. I'd love it. You see these big strong feet? I could stamp out every spark of your fire before I even got warm."

Well the wolves didn't like that and so they argued some more. Finally one of the wolves said, "I have an idea. Turtle, we'll build that roaring fire. We'll put a clay pot of water on the fire, throw you in, boil you, and make turtle soup!" Turtle thought very quickly and said, "Oh, please do. I'd love it. You see these big strong feet? I could stamp your pot to pieces before the water could get warm!"

The wolves didn't like that either. They argued and argued and finally one wolf said, "Well then, Turtle, I know what we'll do with you. We'll carry you down to the deepest part of the river and throw you in. We'll stand on the bank and watch you drown!" And Turtle thought very quickly and said, "Oh, no, not the river! Anything but the river!"

Well, as soon as the wolves heard that, of course they carried Turtle down to the riverbank. They threw him into the water as hard as they could, which should have been fine. Turtles live in the river. But Turtle didn't land in the water the way he thought he would. The wolves threw him so hard, he went spinning end over end as he fell. And landed on his back on a rock in the middle of the river, and then he bounced into the water.

As Turtle swam to the other side of the river, he could feel his back shifting and moving. When he crawled out of the water and looked over his shoulder, he saw that his beautiful shiny shell had been cracked into a dozen pieces.

Now, Turtle wasn't a mighty hunter, but he was a very good doctor. He knew many conjuring secrets. He knew the healing plants and how to prepare them. When he had gathered all the plants he needed, he went about the business of doctoring himself, singing, "Gu`daye`wu, Gu`daye`wu (GUNH-dah-YAY-wunh), I have sewn myself together, I have sewn myself together."

And over the time that has passed from that day to this, Turtle's shell has grown strong again. But if you look closely, you can still see the lines where Turtle's back was cracked, and you will never see another turtle eating corn soup from wolf-ear spoons.

(Reprinted with permission from: <u>How Turtle's Back Was Cracked: A Traditional Cherokee Tale</u>. Gayle Ross. Dial Books for Young Readers: New York, NY, 1995).

"The Farth on Turtle's Back"

Before this Earth existed, there was only water.

It stretched as far as one could see, and in that water there were birds and animals swimming around. Far above, in the clouds, there was a Skyland. In that Skyland there was a great and beautiful tree. It had four white roots that stretched to each of the sacred directions, and from its branches all kinds of fruits and flowers grew.

There was an ancient chief in the Skyland. His young wife was expecting a child, and one night she dreamed that she saw the Great Tree uprooted. The next morning she told her husband the story.

He nodded as she finished telling her dream. "My wife," he said, "I am sad that you had this dream. It is clearly a dream of great power and, as is our way, when one has such a powerful dream we must do all that we can to make it true. The Great Tree must be uprooted."

Then the ancient chief called the young men together and told them that they must pull up the tree. But the roots of the tree were so deep, so strong, that they could not budge it. At last the ancient chief himself came to the tree. He wrapped his arms around it, bent his knee and strained. At last, with one great effort, he uprooted the tree and placed it on its side. Where the tree's roots had gone into the Skyland there was now a big hole. The wife of the chief came close and leaned over to look down, grasping the tip of one of the Great Tree's branches to steady her. It seemed as if she saw something down there, far below, glittering like water. She leaned out further to look and, as she leaned, she lost her balance and fell into the hole. Her hand slipped of the tip of the branch, leaving her with only a handful of seeds as she fell, down, down, down, down.

Far below, in the waters, some of the birds and animals looked up.

"Someone is falling toward us from the sky," said one of the birds.

"We must do something to help her," said another. Then two Swans flew up. They caught the Woman From The Sky between their wide wings. Slowly, they began to bring her toward the water, where the birds and animals were watching.

"She is not like us," said one of the animals. "Look she doesn't have webbed feet. I don't think she can live in the water."

"What shall we do, then?" said another of the water animals.

"I know," said one of the water birds. "I have heard that there is Earth far below the waters. If we dive down and bring up Earth, then she will have a place to stand."

So the birds and animals decided that someone would have to bring up Earth. One by one they tried.

The Duck dove down first, some say. He swam down and down, far beneath the surface, but could not reach the bottom and floated back up. Then the Beaver tried. He went even deeper, so deep that it was all dark, but he could not reach the bottom, either. The Loon tried, swimming with his strong wings. He was gone a long, long time, but he, too, failed to bring up Earth. Soon it seemed that all had tried and all had failed. Then a small voice spoke. "I will bring up Earth or die trying."

They looked to see who it was. It was the tiny Muskrat. She dove down and swam and swam. She was not as strong or as swift as the others, but she was determined. She went so deep that it was all dark, and still she swam deeper. She went so deep that her lungs felt ready to burst, but she swam deeper still. At last, just as she was becoming unconscious, she reached out one small paw and grasped at the bottom, barely touching it before she floated up, almost dead.

When the other animals saw her break the surface they thought she had failed. Then they saw her right paw was held tightly shut.

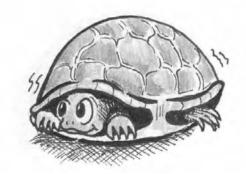
"She has the Earth," they said. "Now where can we put it?"

"Place it on my back," said a deep voice. It was the Great Turtle, who had come up from the depths.

They brought the Muskrat over to the Great Turtle and placed her paw against his back. To this day there are marks at the back of the Turtle's shell which were made by the Muskrat's paw. The tiny bit of Earth fell on the back of the Turtle. Almost immediately, it began to grow larger and larger and larger until it became the whole world.

Then the two Swans brought the Sky Woman down. She stepped onto the new Earth and opened her hand, letting the seeds fall onto the bare soil. From those seeds the trees and grass sprang up. Life on Earth had begun.

(Reprinted with permission from: "The Earth on Turtle's Back," <u>Native American Stories</u>. Story told by Michael J. Caduto and Joseph Bruchac. Fulcrum Publishing: Golden, Colorado, 1991.)



ACTIVITY #14: HOW DID YOU GET THAT FABULOUS HIDING SPOT?

TOPIC

How do myths and legends help us explain the features of an organism and connections to our environment?

BACKGROUND INFORMATION

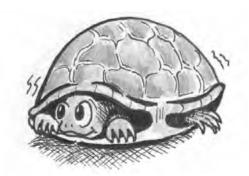
Students should read the attached legends "How Turtle's Back Was Cracked" and "The Earth on Turtle's Back." Teachers may also wish to review other types of legends and myths with students in order to present a variety of creative sources.

MATERIALS

Student work sheet

METHOD

Read the legends "How Turtle's Back Was Cracked" and "The Earth on Turtle's Back." Assign students into groups and have them create their own legend on the uses of the turtle shell. Students can use a similar format to the Cherokee legend or create a unique one as a group. To begin, students should conduct research as a group, and should brainstorm the functions of the turtle shell or life history.



ACTIVITY #14: HOW DID YOU GET THAT FABULOUS HIDING SPOT?

METHOD

In your groups, create your own legend on the uses of the turtle shell. To start, you should research and brainstorm (as a group) the functions of the turtle shell. List your ideas below. Don't forget: Be creative and have fun!

The turtle uses its shell f	or



ACTIVITY #15: TO BE OR NOT TO BE

TOPIC

How do myths and legends help us explain the features of an organism and connections to our environment?

BACKGROUND INFORMATION

Students should read the attached legend <u>How Turtle's Back Was Cracked</u>. Teachers may also wish to review other types of legends and myths with students in order to present a variety of creative sources.

MATERIALS

Student work sheet Costumes (depending on student design)

METHOD

This activity can be used as a follow-up to Activity #14: How did you get that fabulous hiding spot? Students can re-enact the myth or legend that they created in Activity #14 or they can choose one of the other legends and myths associated with the turtle.

In small groups, students will use their chosen story and perform a short skit based on the myth or legend. Students should be encouraged to be creative. They can alter the myth or legend if they choose. For example, students can perform a modern-day version of the legend, using current language and music. Other examples of performance styles include mime, soap opera, Shakespearean (old English), poetic or musical.

Students should submit a script, including all characters necessary and the dialogue. Each script should also include a brief synopsis of the entire myth or legend.



ACTIVITY #15: TO BE OR NOT TO BE

-	Names of Group Members
	Title of Myth or Legend
	Performance Style
-	Names and Features of Characters
-	
-	Props and Materials Needed
- - -	
-	