

## Our Alberta

Welcome! Six students from all around Alberta are eager to share stories and information with you about the areas in Alberta where they live. You will be invited to share your stories, too. Together, we will build a picture of Alberta and the people of Alberta.



Does everyone see Alberta the same way?



**Dilpreet**

Hi! *Sat Siri Akal!* (sat sree a kal) I'm Dilpreet. I was born in India. My family has moved around Canada because my dad works for the railway. Now, we are living in Jasper, and I call myself an Albertan. I'm so lucky to be near the Rocky Mountains that I love, in the heart of one of Canada's famous parks.



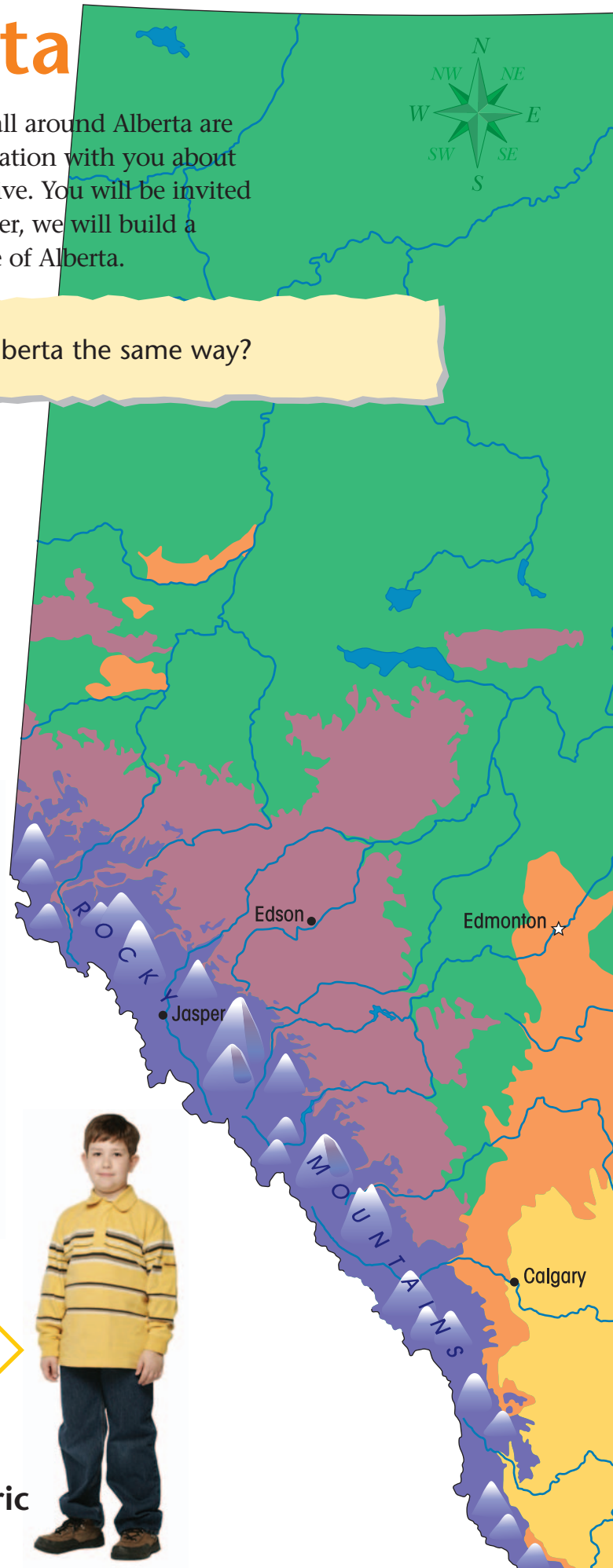
**Brittany**

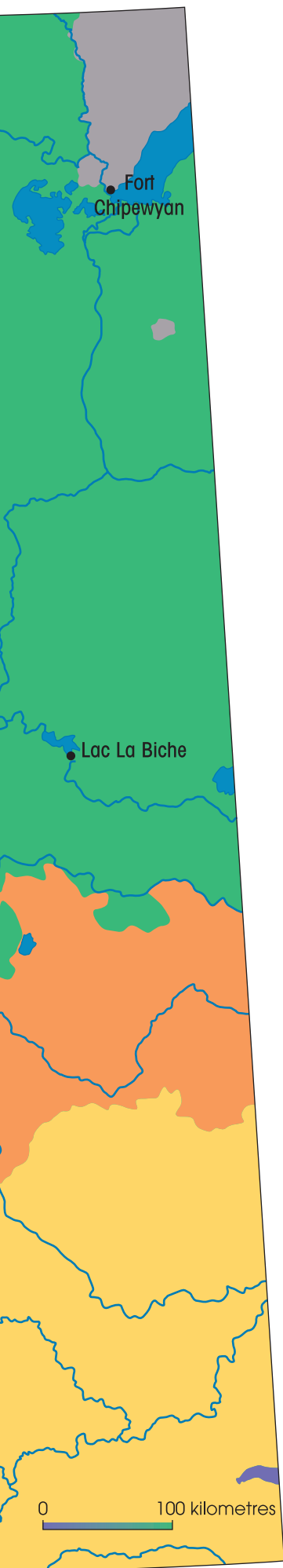
Hello! I'm Brittany. My family has all sorts of different cultural roots, including English, Irish, and Ukrainian. I am especially interested in learning about Alberta long ago. I have lived in Edson my whole life. I am happy to be an Albertan.



**Éric**

Hello! *Bonjour!* (bohn joor) My name is Éric. I live in Edmonton, Alberta's capital city. Before I was born, Dad moved to Alberta from Québec. Mom's great-grandparents settled and farmed in Alberta. We are **Francophone** and our first language is French.





Hi! *Eḏlāneté!* (ed la net ay) My name is Alec and I am Dene Sḱliné (de nay soong lin ay). I come from Fort Chipewyan. I am very proud that my people are one of the **First Nations**. We are descended from the first people to live in Alberta.



Alec



Hello! *Tān'si!* (tan si) My name is Nicole. I live in Lac La Biche (lak la bish). I am **Métis** (may tee) and an Albertan. Métis people's ancestors include the First Nations people and Europeans. Our stories go back thousands of years. I'm glad to be able to share some of them.

Nicole

Hi! *Ni hao!* (nee how) My name is Mei-Ling. Years ago, my relatives came from China. My mom and I were born in Calgary. One of my favourite things about Alberta is the great mixture of languages and cultures we have here.



Mei-Ling

#### Legend



Rocky Mountain Region



Canadian Shield Region



Foothills Region



Boreal Forest Region



Parkland Region



Grassland Region

The colours on this map show the six areas, or **natural regions**, of Alberta we will explore together. Each natural region is similar throughout, yet different from the other regions because of the land, environment, and living things found there.

# Our Identities



What does it mean to be an Albertan?

## Pause

1. What do you think it means to be an Albertan? Are you and your family members Albertans?

When the grade four students on pages 2 and 3 introduced themselves, they shared some information about their **identity**. Identity is how people and communities see themselves. It is who you are.

Parts of your identity are personal, such as your name. Other parts of identity are shared. We share the province where we live. Many people in Alberta identify themselves as Albertans.



Alberta has many neighbours. British Columbia is located to the west and Saskatchewan is to the east. The Northwest Territories is north of Alberta.

# Learning About Our Alberta



What are some ways we can learn about Alberta?

I have been thinking about the ways I learn about Alberta. My family gets the newspaper. Sometimes, I ask questions about the news stories or read the articles myself.

When my family goes on vacation, we usually visit places in Alberta. My parents often tell stories about their experiences in Alberta. They share their ideas about the **quality of life** here. This includes all of the things that are important to people and make their lives good.

In school, we have lots of books about Alberta. My teacher has shown my class DVDs. We've also seen art displays and plays. We've heard musicians play and sing their stories. I think Alberta has many stories and many voices!

Stories are really important to me, too. My culture has a strong **oral tradition**. Knowledge, history, and language are passed from generation to generation by the spoken word. My dad and the Elders in my community share cultural and traditional stories and teachings. **Elders** are people in our community who are respected for their great wisdom about our beliefs and culture.

Some sacred teachings and stories have been repeated many times over many years. Each one has a meaning and purpose I need to think about. They help me understand our past, our culture, our beliefs, and our future. I gain a sense of belonging among my people and a connection to the land. This will always be a major part of who I am.

## Let's Get Started

We will share many stories to help us learn more about Alberta. We will begin with stories of Alberta's earliest times and find out how discoveries of dinosaur remains have helped us piece together some of Alberta's past. After that, we will visit each natural region to learn about what is important to the people who live there.





# Alberta's Beginnings



What stories teach us about Alberta's beginnings?

There are many different stories about Alberta's beginnings. Each story presents a point of view. The stories on pages 6 and 7 are two examples of the many points of view.



**Aboriginal people** believe their ancestors have always been in North America. The Cree people are one of the Aboriginal groups in Alberta. I am Métis. Some of my ancestors were Cree and some were Francophone Canadian. I have Métis friends who are part English or Scottish.

People around the world have **creation stories**. These stories describe how the world and living things began. There are often similarities in the stories.

In Cree stories, Wîsahkecâhk (wee suh kee chahk) is a character who represents many things. He can be wise or he might show foolishness, jealousy, or other traits. We can learn something from each story.

## A Cree Creation Story



This painting is by Dale Auger, a well-known Cree artist.

The Creator made all the animals and first people. He told Wîsahkecâhk to teach them how to live. Wîsahkecâhk did not obey. The Creator was displeased and sent a huge flood.

Only Wîsahkecâhk, Otter, Beaver, and Muskrat escaped drowning. They needed somewhere to live, so Wîsahkecâhk asked the others to dive down to get some earth from the seabed to make an island. Each one tried, but only Muskrat was successful.

The Creator had given Wîsahkecâhk powers. Wîsahkecâhk used his powers. When he blew on the bit of earth, it

expanded and turned into an island.

Wîsahkecâhk sent coyote and fox out to walk around the world to see if it was big enough. When they didn't come back, he knew it was big enough.

—collective version, Cree Elders, Treaty 6 Tribal Chiefs region

# The Story of Pangaea

**Geology** is the study of the Earth, its rocks and soil, and its beginning billions of years ago. Scientists believe the land on Earth was once one giant continent called Pangaea (pan jee uh). The sun warmed the waters around it, and plants and creatures developed in the sea.

Scientists also think animals with backbones developed over a span of about 500 million years. Some creatures eventually moved to the land.

According to scientists, parts of Pangaea kept rising and sinking in the sea. **Erosion** occurred when wind and water wore some of Pangaea's mountain rock away. Plant and animal remains were covered in the layers of sediment. Over time, the layers turned to rock, and plant and animal remains formed **fossils**.



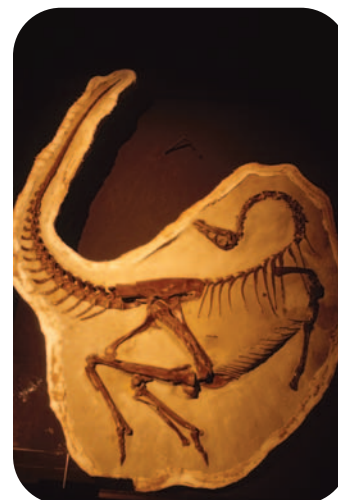
Scientists believe Pangaea gradually broke into several continents that slowly drifted apart. It took millions of years for the continents to move to where they are now.

## Pause

1. What other creation stories do people have?
2. Why do you think people all around the world have stories about creation?
3. Begin a Know-Wonder-How-Learn (KWHL) chart about Alberta's fossils. In the first column, list what you know about Alberta's fossils. In the second column, write questions about things you wonder about. In the third column, list some ways you might find the answers. In the last column, write answers to your questions as you discover them.



The Ornithomimus (or ni thuh my mus) was a small dinosaur that lived 74 to 76 million years ago.



This is a fossilized skeleton of an Ornithomimus. Ornithomimus remains have been found in Alberta.

# Discovering Alberta's Past



My grandfather is a **paleontologist**. He studies life that existed in prehistoric times and tells me amazing stories. He says learning about fossils is one way to better understand the land and its history. I share this interest in paleontology, so I call myself a junior paleontologist!

Many First Nations across Alberta knew about fossils long before paleontologists. Grandfather gave me this article about one of the First Nations that discovered fossils in Alberta.

## First Fossil Finds

The Piikani (pee ga nee) are a First Nation living in southern Alberta. The Piikani people made many early fossil discoveries in Alberta.

The Piikani knew where fossil bones were located in the banks of the Red Deer River. Among these fossils were huge backbones that were half a metre around in size.



First Nations people had an understanding that the fossils were sacred. The Piikani people believed the grandfather of the buffalo was buried there.

They honoured the grandfather buffalo and showed respect by placing gifts near the remains. In turn, they hoped the Creator and the spirit of the animal would help them in their buffalo hunts.

Dinosaur bones are still being found along the banks of the Red Deer River and other parts of Alberta.

First Nations people were the first to discover fossils in Alberta.



# Joseph B. Tyrrell Finds Albertosaurus

In 1884, Joseph B. Tyrrell set out from Calgary with three helpers to make maps of the **Badlands**. This is a very dry area in southern Alberta, known for land that has been carved by erosion. The erosion has uncovered many fossils.

While working, Tyrrell found a mysterious brown, rock-like object. That night, he wrote:

June 9, 1884

My dearest Father,

Today I made the most amazing discovery. I'm not sure what it is, but it is unlike anything else I have ever seen. The skull is nearly perfectly preserved, but I'm not sure how to categorize it. I can only think it is a creature from a time beyond our fathoming...

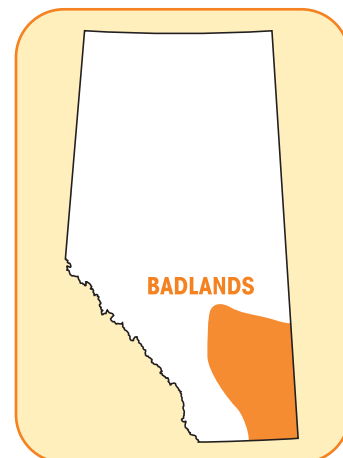
Later that summer, Tyrrell found the skeleton of an unfamiliar animal in the hard earth. Using axes and small hammers, Tyrrell and his team chipped away to get the fossilized bones. What was this creature?



The fossils were carted to Calgary. The heavy weight of the fossils kept breaking the axles of the wagon. Tyrrell and the group had to keep stopping to chop down spruce trees to make new axles.

The bones were sent to Toronto and Ottawa. The scientists had not seen such a creature before. They were the bones of a meat-eating animal that lived 70 million years ago. The creature was called Albertosaurus because its bones had been found in Alberta.

The government sent trained men to hunt for more dinosaur bones. It is said that Tyrrell started "The Great Canadian Dinosaur Rush"!



The Badlands are found within the area shown above.



This photo of Joseph B. Tyrrell was taken in 1881.



# Fossil Fascination



How do fossil discoveries help us understand Alberta's past?



Éric used to live next door. His family moved to Edmonton, but we all keep in touch. Ever since we heard this story about Wendy Sloboda, Éric has been fascinated by fossils, too.

## Dinosaur Eggs

In 1987, Wendy Sloboda was a teenager interested in looking for dinosaur fossils near her home in southern Alberta. One day, she found some curved fossil fragments near the Milk River. Were they bits of dinosaur eggs?

The fossils were sent to Dr. Philip Currie, a paleontologist who was working at the Royal Tyrrell Museum in Drumheller. The Tyrrell is a dinosaur museum known worldwide for its fossil collections. The exciting answer that came back to Wendy was "Yes!" For a few weeks, she was a volunteer working with Dr. Currie to explore Canada's first dinosaur egg site.



This reconstructed dinosaur egg was found in southern Alberta.

In this photo, Wendy Sloboda is pointing to a dinosaur egg fossil at Devil's Coulee, south of Lethbridge.



Over the next 10 years, Ms. Sloboda often returned to the egg site. She made many exciting discoveries for the museum in Drumheller. One day, she was searching in the same area when she came upon an egg. Carefully digging nearby, she found another nine eggs, laid in pairs in neat rows. The fossils helped scientists learn more about dinosaurs and their young.

# Our Inquiry

When we heard about Wendy Sloboda's discoveries, Brittany and I began to imagine going on a fossil dig ourselves. We wanted to know more about the Royal Tyrrell Museum. After all, we might be paleontologists some day!

Brittany and I were on the lookout for news about the Royal Tyrrell Museum and its findings. Dr. Philip Currie is a world-famous paleontologist who works at the museum and the University of Alberta. He wrote a magazine article about hunting dinosaur eggs in Alberta and China. We wondered what fossils in China have to do with fossils in Alberta.

When our families were making plans for our summer vacation, Brittany and I suggested the Badlands. Everyone wanted to see Drumheller and the museum. We could hardly wait!

Brittany had a great idea. With the permission of our parents and her grandfather's help, we sent an e-mail to Dr. Currie.

To: Dr. Currie

Cc:

Subject: Interview

Dear Dr. Currie,

We are grade four students. We read about your fossil egg work. We are planning to visit the Royal Tyrrell Museum in July. We would like to find out more about your work, the museum, and its fossils. May we interview you at the museum, please?

Thank you for your time and help.

Brittany and Éric

Dr. Currie replied he would be happy to be interviewed. Brittany and I started planning our questions that very day.

Why did you go to China to dig dinosaur eggs when there are some in Alberta?

What other ways do you learn about dinosaurs?



## Pause

1. Imagine you are going to interview a paleontologist about his or her work. What questions would you ask?



# Our Visit to the Royal Tyrrell Museum



In what ways does the Royal Tyrrell Museum help us learn about our fossil history?



Soon after our families met up in Drumheller, we all headed for the Royal Tyrrell Museum. It has wonderful displays to explain changes in Alberta's land over billions of years.

We got to see huge dinosaur skeletons and dinosaur models. One room has glass walls, and we watched as bones were dug out of stone by the paleontologists. Another room has plants like the ones that were around during the time of dinosaurs.

We were very eager to meet Dr. Currie. We were given special passes and were taken to his office. He told us about the dinosaur he is studying right now, and then he invited us to ask our questions.





## Our Interview with Dr. Currie

**Brittany:** How does the Royal Tyrrell Museum help scientists find out about dinosaurs?

**Dr. Currie:** The museum helps in various ways. It has one of the world's largest collections of fossils, which paleontologists can study. Another great thing about the museum is that we have a number of scientists who work together at the same place. We have laboratories, so we can study the fossils, measure them, and then examine them more closely with microscopes.

**Éric:** How do paleontologists tell each other about their finds?

**Dr. Currie:** Paleontologists meet each other at conferences. We also have had scientists visit the museum from every continent, except Antarctica. We use e-mail to communicate as well.

**Brittany:** What are some of the types of equipment paleontologists use?

**Dr. Currie:** Sometimes, we use large equipment, such as jackhammers. The museum also supplies the kind of equipment that would be found in a dentist's office, such as small drills. The nearer we approach a bone, the smaller the equipment we use. This prevents damage to the fossils.

### NAMES IN ALBERTA

The Tyrrell Museum was named after Joseph Burr Tyrrell, the man who found the first dinosaur skull in Alberta. The word "Royal" in the name Royal Tyrrell Museum was given by Queen Elizabeth II when she visited Alberta. Only a few special museums have this title.



continued



## Fast FACTS

Dinosaur Provincial Park is in the Badlands. The area was set aside as a provincial park in order to protect the fossils. The fossils are so important to the world that the park has also been named a World Heritage Site by UNESCO, a part of the United Nations.

**Brittany:** Why did you go to China to dig dinosaur eggs when there are dinosaur eggs in Alberta?

**Dr. Currie:** Dinosaur eggs have been found in many parts of the world. They are different species and have been preserved in different ways. The Chinese eggs have whole skeletons inside. We exchange scientific information with the Chinese scientists.

**Éric:** If a farmer finds dinosaur fossils, such as dinosaur eggs, on his land, does she or he have the right to keep the fossils?

**Dr. Currie:** Under the laws of Alberta, the fossils are owned by the province for education and science. Special permission is needed to dig up fossils. If someone finds a fossil, he or she should remember its location and contact an expert at one of Alberta's museums or universities. Trained people can dig up the fossils, identify them, and tell parts of the story of their past.

**Éric:** Why is it important that we know about fossils today?

**Dr. Currie:** Scientists today use animals to help medical research. The more we know about how animals are related to each other, the better the research will be. Also, learning about things that happened in the past helps us plan our future.

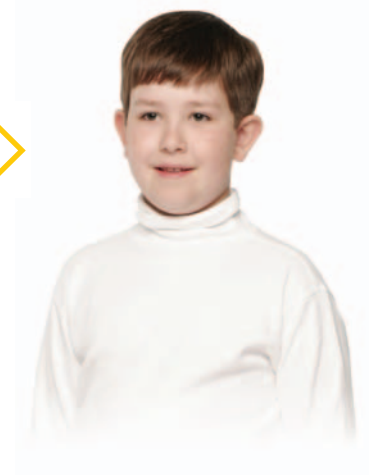
**Éric and Brittany:** Thank you very much for your time today. We enjoyed meeting you and learning more about the Royal Tyrrell Museum.

This photo shows Dr. Koppelhus and Dr. Currie working at a fossil dig site.



# Sharing Fossil History

Brittany and I have learned many things about fossils in Alberta. We made a web about our discoveries. We already have a new question!



## Pause

1. How are ideas organized on this page? In what other ways can ideas be organized?



2. What do you think the most important job of the Royal Tyrrell Museum is? Explain your answer.
3. Do you know the answer to the question on the web? How might you find out?

# What Have We Learned?

In this chapter, we learned about Alberta's fossil history. Aboriginal people and paleontologists shared stories and information.

We saw an example on pages 11–15 of how the inquiry model can be used to answer questions. We will be using different parts of the model throughout our studies to research and participate.

## Inquiring



1. Every year, museums such as the Royal Tyrrell Museum have special programs for students. However, museum programs change from year to year. How does a student find out what programs are available?

One way to find this information is to go to a museum's web site. Go to [www.nelson.com/albertasocialstudies](http://www.nelson.com/albertasocialstudies). Follow the link to learn about programs for children. You may notice that some of the programs are for certain age groups. Which programs could you join that would be right for you? Use your notebook to list the programs. Put a star beside those you would be interested in. Make a title for your list.

## Developing Your Thinking

2. This newspaper article is from the *Daily Herald Tribune* in Grande Prairie. In it, the writer talks about fossils being stolen by amateurs. Amateurs are people who do not have special skills or training.

Dr. Currie told Brittany and Éric that fossils are owned by the province. When someone finds a fossil that would have to be dug up, they should contact experts. Only trained people should dig up fossils. They must ask permission.

Do you think it is true, or a fact, that the fossils were stolen? Or do you think it is the author's own idea, or opinion, that the fossils were stolen? Write what you believe and why you believe it.

November 10, 2004

### Pipestone Creek fossils stolen by amateurs

"We know fossils have been taken from here since 1989. We need to clean up the site and plunk a building on top of it. The material is there for everyone to share. It's not there for a few people's personal greed."



## Appreciating Our Alberta

3. Look back at the questions on the strips of paper found throughout the chapter. Alberta's beginnings are very interesting!

What do you appreciate about Alberta's beginnings? Write or draw your ideas to answer these two questions:



What stories teach us about Alberta's beginnings?



How do our fossils help make Alberta unique?

## Reflecting

4. Think about your work with the inquiry model. Why do you think the inquiry model has two parts: Research and Participate? Share your ideas with a small group.
5. Éric and Brittany learned about some fossil discoveries. They began to wonder about the Royal Tyrrell Museum. They found more sources of information and asked Dr. Currie some questions. Why is it important to keep asking questions? Explain your thinking.

## The Alberta Project

Stories can be presented in a variety of ways. Personal stories, legends, and photos can tell stories. Songs and poetry can tell stories, too. Stories can be spoken, written, or shown.

There are many Alberta stories in this textbook. They reveal ideas about the quality of life in Alberta and our identity.

In the next six chapters, the student guides you met on pages 2 and 3 will tell you about important features of their regions. They will share a number of stories in a variety of ways, from photos to postcards. At the end of each chapter, you will be invited to create and share stories, too. This is an opportunity to celebrate Alberta.

Choose someone to interview. Ask them to share a special story about living in or visiting a place in Alberta. Write down the story. Ask the storyteller to check that the story is correct. Be sure to ask their permission to share the story.

