

Unit study based on

# GRANDMOTHER'S

# PIGEON

book by Louise Erdrich unit study prepared by Sharon Jacksack

#### **Social Studies**

# **Geography - Continental Divide**

Grandma skied the Continental Divide. What is the Continental Divide anyway? To folks in North America it is the main water parting of the continent, where the water will flow either mainly to the East or to the West. The divide runs along the crest of the Rockies, from British Columbia, through the United States, and continues southward into Mexico and Central America. It divides the continent's principal drainage into that flowing eastward (to the Hudson Bay in Canada or to the Mississippi River) and that flowing westward (to the Pacific Ocean). Since every continent except Antarctica has a continental divide, can you find them all on the world map?

Note: Asia has several, and Europe's are hard to find.

#### **Geography - Getting to Greenland**

Grandmother was hoping to get to Greenland by way of the Pacific Ocean. She was going to take the scenic route around the horn. Grandmother was speaking of Cape Horn at the far southern tip of South America. The Drake Passage, south of Cape Horn separates South America from Antarctica. It is known as having the roughest seawater in the world. It is only 600 miles across! Trace Grandmother's possible route on a world map. Using the measurements in the map legend, can your student figure out how long of a journey it would be to go that way?

#### **History - Sun Tzu**

Grandmother had a model of Sun Tzu's horse on her windowsill. Sun Tzu was a Chinese General who lived at 500B.C. He is best known for writing a series of essays on the "Art of War." These essays are very interesting to read, and full of wisdom that translates to today. His most basic idea is that "All warfare is based on deception". Another key Sun Tzu principle is that "The supreme art of war is to subdue the enemy without fighting." If your students are interested in this topic, or if you want some really interesting copywork pieces, the texts of his essays are available on line.

An example: "Know the enemy and know yourself; in a hundred battles you will never be in peril. When you are ignorant of the enemy, but know yourself, your chances of winning or losing are equal. If ignorant both of your enemy and

yourself, you are certain in every battle to be in peril."

## **Personal Relationships - Grandparents**

The opening page of the story sets up the kind of grandparent the children's grandmother is. The love and affection as well as the awe they have for their grandmother shines through the words. As you read the book with your child, is there someone who they revere with the same sort of awe and affection? How would the story be different if that person took the place of Grandmother in this book? What sort of adventure would they go on? If it is possible, have your child call or write to their chosen loved one. It will brighten their day.

## **Language Arts**

#### Literature - Favorite Books

Grandma's favorite book was *Consider the Porpoises*. Looking at it after she had gone seemed to help her family connect with her still. Our favorite books tell a lot about ourselves. What are the favorite books of your child's grandparents, aunts and uncles, your favorite books from childhood or adulthood? If appropriate,

share some of the favorite books with your child. The books you love may become their favorite, too.

#### **Literature - Fantasy Stories**

A genre is a type of book. Within fiction stories, the main genres are adventures, romance, horror, fantasies, historical fiction, mystery, realistic fiction, and science fiction. Also be aware that not all stories fall cleanly into one group or another, for instance you can have a mystery set in the future (science fiction) or in the past (historical fiction.) After discussing genres with your child, ask him what he considers Grandmother's Pigeons to be. Could the events in the story really happen? At what point does your child realize that this tale is pretty far-fetched?

## **English Roots**

The word "ornithology" comes from the Greek. "Orintha" for chicken and "logos" for word/science. It is the branch of biology concerned with the scientific study of birds.

What other "ologies" can your student think of? Here is are a few to start off:

Biology - Study of life (gr. "bios" means life)

Geology - Study of rocks (gr. "ge" means earth)

Meteorology - Study of atmosphere (gr. "meteron" means things high in the sky).

Zoology - Study of animals (gr. "zoon" means animals)

In addition to Greek, plenty of today's English comes from Latin. In the scientific name for the passenger pigeon Ectopistes migratorius can you find the part that means that this bird makes migrations? In fact, the genus name *ectopistes* in Greek means "a wanderer" while the species name *migratorius* means migratory in Latin.

#### Science

#### **Nature - Creating a Nature Collection**

One look at the pictures of Grandma's room and you can see she was a real naturalist. There were bits and pieces of nature everywhere. See if you can find the following in the pictures: Antler, Birds nests, Dragonfly collection, Dried grape stem, Eggs, Egyptian boat, Feathers, Shells, Sketches, Starfish, Stones, and a Stuffed Pigeon.

One of the best ways to have your own nature collection is to create a nature table. Even if you don't have room for a whole table, a bulletin board on the wall or even a small spot on a windowsill will suffice. The nature table is an everchanging exhibit which can involve the whole family throughout the year, for it consists of a display of natural items found during walks, drives, and other excursions. Country areas will clearly yield more material for the table than urban areas, but sharp eyes will find a surprising amount of displayable items even in a town.

# **Birds - Passenger Pigeons**

The Passenger Pigeon was once the most abundant bird in North America, with numbers estimated as high as 5 billion birds, but it is now extinct. Its large

numbers and its colonial nesting and roosting behavior made killing many birds fairly easy. Some records list a processing plant that handled over 18,000 birds each day in 1855. Passenger Pigeons were hunted for their market value as a food source, and new weapons helped increase the number taken. The decline of this species reportedly began as early as the mid-1800s. The last known Passenger Pigeon died in the Cincinnati Zoo in 1914.

What lessons can we learn from the passenger pigeon? This website discusses recent extinctions. It is a very good, informative site. A caveat, however, for those people who are bothered by evolutionary content, you might want to scan over and print out just the information you want your child to see, as there is some old Earth statements, as you might expect on a website on extinct animals.

#### **Birds - Imprinting**

In the picture of the mother feeding the baby birds, the daughter is wearing a bird puppet on her hand next to the nest. Why is she doing this? When baby birds are raised from chicks, they will see their caretakers as their parents. If that is a human, they are evermore imprinted on humans. This makes it a very real problem when birds are released to the wild. One way that has been found to minimize the humans' impact on the chick is by use of a puppet that looks like the bird's real parent. This method has been used with great success with the California condor. As a result of captive breeding and the use of puppets, the California condor populations have increased dramatically from 22 birds in 1987 to nearly 250 birds in 2005.

Sometimes a bird owner or trainer wants to have a bird imprinted on a human, such as in the fields of falconry or when hand-raising parrots or cockatoos. Most of the time, however, raising a wild bird from a chick is a bad idea. Many birds who are imprinted on humans end up at wildlife centers, when they cannot adapt to life in the wild, or when other birds, sensing that the imprinted bird is different, attack it.

Art

**Art Appreciation - Paintings of Paul Klee** 

Over the mantle near the stuffed pigeon is Grandmother's original painting by Paul Klee.

Paul Klee painted in a unique and personal style; no one else painted like he did. He used pastels, tempera, watercolor, and a combination of oil and watercolor, as well as different backgrounds. Besides using canvas that he usually painted on he used paper, jute, cotton, and wrapping paper. Klee valued the "primitive," and especially the art of children. He envied their freedom to create signs, and respected their innocence and directness.

A Paul Klee inspired lesson plan

#### **Applied Math**

#### **Big Numbers**

Passenger pigeons passed at a rate of 300 million birds per hour. How many would pass in 1 day? In three days? Using the internet and a map trace the route of a migrating passenger pigeon. How many miles would a passenger pigeon travel? If the entire flock made the migration, how many miles would there be altogether for all pigeons? These are some big numbers!!

## **Counting**

From start to finish, how many books are pictured in *Grandmother's Pigeons*? There are many other opportunities for counting as well. There are birds, nests, starfish, wind chimes, and a number of other things that would be good for counting. For your younger reader, you could make a counting book with things from

Grandmother's Pigeons

- 1 There's only one Grandmother
- 2 There are two children missing their grandmother
- 3 There are three eggs in the nest
- 4 There are four travel stickers on Grandmother's trunk
- 5 There are five wind chimes in the tree
- 6 There are six dishes sitting on top of Mother's china cupboard
- 7 There are seven smooth stones for stacking

- 8 Mother got eight books from the library to help her raise the chicks
- 9 There are nine birds flying while Grandmother rides on the back of a porpoise You get the idea.

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