

Welcome, Time Traveler

You already have a history. Something happened to you yesterday. Something happened on the day you were born, even though you do not remember it.

Now go back further, so far that nobody alive can tell you what happened. How would you find out?

People leave things behind. A footprint in soft ash. A stone with an edge sharp enough to cut. A cave wall covered with painted animals. Those things are still here. You have to learn how to ask.

That is what this book is for.

Lessons 1 and 2 begin at home, with your own family and with objects you can hold. In Lesson 3 the traveling starts. You touch your Time Travel Passport, close your eyes, and open them somewhere else.

Then you get to work. You will make a footprint in clay and measure yourself against Lucy. Test rocks to find which one cuts and which one digs. Build a raft and find out what makes it tip. Design clothes warm enough for the Ice Age. Invent a new tool. Draw the animals of Chauvet Cave. Live like a hunter-gatherer for an afternoon. Cook. Dig. Mark every stop on your Passport map.

You will also learn to think like a historian, one tool at a time, so you can work out what the evidence really shows.

Begin with Lesson 1. Your first stop is home.

Lesson 1:

History Starts with You



In This Lesson

- ☐ Read Lesson 1 in the Teacher's Guide
- ☐ Set up your Time Travel Passport
- ☐ A Story from the Past
- ☐ Think Like a Historian
- ☐ Words to Know

A Story from the Past

Choose someone to interview. A grandparent, an older relative, a family friend, or a neighbor who knows a story from the past.

PICK ONE OR TWO QUESTIONS TO ASK:

- ☐ What was your favorite place when you were my age?
- ☐ What did you love to do for fun?
- ☐ What was your home like?
- ☐ Can you tell me about something surprising that happened to you?
- ☐ How was life different from what it is now?

Listen closely. Notice the sound of their voice. Do they pause? Do they laugh?

MY INTERVIEW

Who I interviewed: _____

How I know them: _____

One question I asked: _____

One thing they told me: _____

A drawing of something from their story:



Think Like a Historian

THINKING TOOL: Metacognition

Metacognition is noticing and thinking about your own thinking.

THERE ARE TWO KINDS OF THINKING TO NOTICE.

Automatic thinking happens instantly, without effort. You just know it.

Strategic thinking is thinking you do on purpose, where you choose a strategy.

WHAT YOUR MIND DID WHILE YOU LISTENED

You listened to someone tell you about a time before you were born.

1. Which kind of thinking did you use? Mark one box for each.

While you listened...	Automatic	Strategic
Hearing their voice.	☐	☐
Knowing who they are.	☐	☐
Picturing the place they told you about.	☐	☐

2. A thinking strategy is something you do to help you figure something out. What did you do to help yourself picture their story?

Mark all that you used.

- ☐ I pictured it in my mind.
- ☐ I asked them a question.
- ☐ I thought about a place I have seen that was like it.
- ☐ I asked them to say it again.
- ☐ I looked at a photo or an object.

3. Why is strategic thinking important for a historian?

- ☐ A historian can just know what happened long ago.
- ☐ A historian was not there, so they must work it out on purpose.
- ☐ A historian remembers the past better than other people.



Words to Know

history: The story of what happened in the past.

Write about or draw one piece of history from your own life

ancestor: A person in your family who lived before you. Your grandparents, and their grandparents, are your ancestors.

Name one of your own ancestors, and one thing you know about them:

Lesson 4:

Tool Makers



In This Lesson

- ☐ Read Lesson 4 in the Teacher's Guide
- ☐ The Dig Site
- ☐ Time Travel Passport
- ☐ Tool Discovery
- ☐ Think Like a Historian
- ☐ Words to Know
- ☐ Writing About History

Tool Discovery

PART 1: THE HANDS THAT MAKE TOOLS

Pick up a button using only your thumb and one finger.

Now try it with no thumb, using only your four fingers. Much harder.

Your thumb presses against your fingers so you can pinch, grip, hold, and turn things. *Homo habilis* had hands that could do this too. It helped them make and use stone tools.

PART 2: TOOL HUNT

Go outside and find three natural objects that might work as tools:

- ☐ A sharp stick with a pointed end.
- ☐ A flat rock, smooth and wide.
- ☐ A pointed rock with edges or a sharp tip.

As you search, think: Could *Homo habilis* have used something like this?

PART 3: TEST YOUR TOOLS

Put your cardboard on the ground.

- ☐ Sharp stick: Try poking, try scraping.
- ☐ Flat rock: Try pounding, try crushing.
- ☐ Pointed rock: Try scraping, try a light cut.
- ☐ Try each one for digging.

If you were *Homo habilis* and needed to cut meat or scrape a plant, which tool would work best?
Did any tool not work the way you expected?

TOOL DISCOVERY WORKSHEET

Draw each tool you found. Write what it is good for.

Tool	Drawing	What it is good for
Sharp stick		
Flat rock		
Pointed rock		

Which tool worked best for cutting or scraping?

Which tool worked best for digging?



Think Like a Historian

THINKING TOOL: EVIDENCE

Evidence is a clue that helps answer a question.

Strong evidence is a clue that answers the question more directly, so you can trust it more.

Weaker evidence is a clue that helps a little but leaves more uncertainty.

While out hiking, you found a sharp rock. It made you wonder: Is this a tool? Scientists have to ask that same question carefully. A sharp rock is not always a tool. Some rocks break sharply all on their own.

So here is the question:

Did a hominin make this rock into a tool?

A detective asks two things about every clue. Does it help answer the question? And how much can I trust it?

1. Here are four clues. For each one, decide.

Clue	Does it help?	If it helps, how strong?
The rock has one sharp edge.	☐ Helps ☐ Does not help	☐ Strong ☐ Weak
Many flakes were knocked off the same way, all around the edge.	☐ Helps ☐ Does not help	☐ Strong ☐ Weak
The rock was found next to bones with cut marks.	☐ Helps ☐ Does not help	☐ Strong ☐ Weak
The rock is a pretty color.	☐ Helps ☐ Does not help	☐ Strong ☐ Weak

2. One sharp edge is a weak clue. Why?

- ☐ A. Sharp edges are boring.
- ☐ B. Rocks can break sharply on their own, so one sharp edge does not tell you a hominin did it.
- ☐ C. The rock is too small.

3. Which would make scientists more sure a hominin made the tool?

- ☐ A. Finding one sharp rock.
- ☐ B. Finding many flakes knocked off the same way, and cut-marked bones nearby.

4. Write it or say it.

You found one sharp rock on your hunt. Is that enough to know a hominin made it? Why or why not?



Words to Know

***Homo*: A group on the human family tree. Every member of *Homo* is a human.**

Homo habilis, *Homo erectus*, and *Homo sapiens* all start with the word *Homo*. Say one thing you know about all three because of that.

***Homo habilis*: A kind of human who lived about 2 million years ago. The name means “handy human.”**

Scientists named *Homo habilis* for something they kept finding beside the bones. Say what it was, and why it earned that name.

tool: An object used to do a job. A person can make it, shape it, or choose it because it works for that job.

You need to dig a hole and you have no shovel. Name something outside you could use as a tool, and say what makes it work for the job.

archaeologist: A scientist who studies places where people from long ago left things behind, like tools, bones, and buildings, to find out how they lived.

An archaeologist digs up your kitchen one thousand years from now. Name one thing they would find, and one thing about your life it would tell them.



Writing About History

In this lesson, you met *Homo habilis*, the toolmakers whose name means handy human. **Add the detail each sentence asks for. Then, write an expanded sentence that includes the detail.**

Homo habilis lived.

when: _____

- *When asks about a time.*
- *The when part goes at the start of the sentence. A comma comes after the when part.*

Homo habilis used tools.

why: _____

- *Why asks about a reason.*
- *When expanding with why, use because.*

Write a statement that answers the question below.

If you could travel back 2 million years, what is one question you would ask these toolmakers?

- *A question starts with a capital letter and ends with a question mark.*

Lesson 13:

Island Innovators



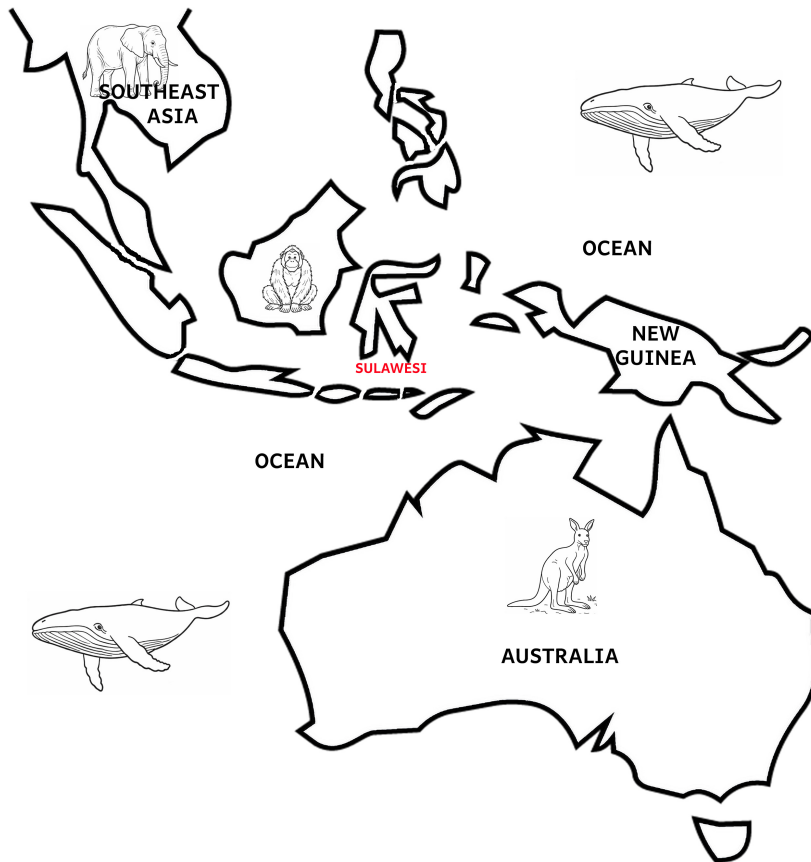
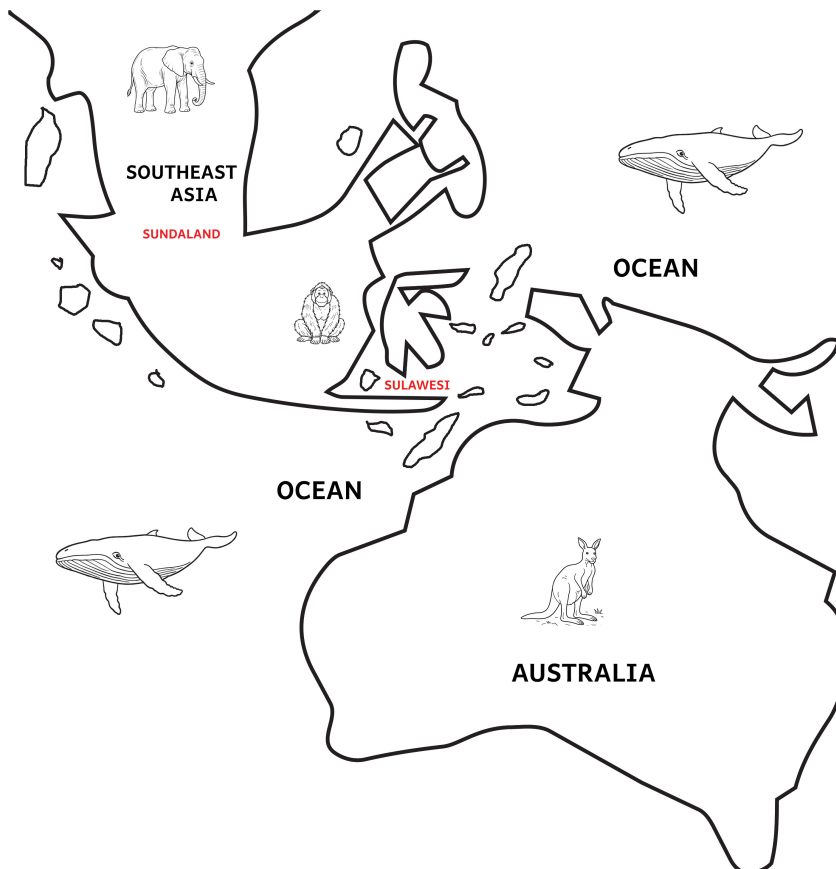
In This Lesson

- ☐ Read Lesson 13 in the Teacher's Guide
- ☐ Find Your Path
- ☐ Time Travel Passport
- ☐ Build and Test a Raft
- ☐ Think Like a Historian
- ☐ Words to Know
- ☐ Writing About History

Find Your Path

These two maps show the same part of the world at two different times. The land and ocean look different because sea levels were much lower 65,000 years ago and before. As you color and compare, look for what changed and what stayed the same.

1. Color the land light green or brown. Color the ocean blue. The animals will help you tell land from ocean.
2. Look at the large land area labeled **Sunda**. It formed when lower sea levels connected islands that are separate today. The families in this lesson began their journey here.
3. Now look at **Australia**. Notice the large shape attached to its northern edge. Find that same shape on the “today” map. What is it called?
4. **Find your path.** The families who reached Australia had to cross open ocean. Even with lower sea levels, there was no land bridge all the way to Australia. They had to island-hop, keeping each crossing as short as possible. Find Sunda. Find Australia. Find the red label **Sulawesi**. Use a pencil to draw your path.
 - ☐ *Option A: Follow the route.* Start in Sunda. Cross to Sulawesi. Hop east through the small islands. Reach Australia.
 - ☐ *Option B: Plan your own route.* Study the map. Is there another way to get from Sunda to Australia using the islands as stepping stones? Draw the route you think makes the most sense.
5. **Compare the maps.** Look at the land labeled Sunda on the older map. Find those same islands on the “today” map. What is different about them today?

Map 1: Today**Map 2: 65,000 years ago, Southeast Asia**

Build and Test a Raft

The raft the grandfather built had to be strong enough to reach a new island. He used what he had learned from everyone who came before him, and then he improved on it. Today, you will be an inventor. You will build a small raft, test whether it floats, and make it better, just like the families in this story did.

PART 1: GATHER AND PLAN

The people in this lesson did not have stores. They used what they found. Collect sticks, twigs, bark, and anything else that might float.

Before you build, test your materials. Do they float? Which float best? What shape will your raft be? How will you hold the pieces together?

PART 2: BUILD YOUR RAFT

Build! Try one of these:

- ☐ **Basic raft:** Lay sticks side by side. Lash them together with string or rubber bands.
- ☐ **Platform raft:** Make a frame of four sticks in a square. Fill the middle with smaller sticks laid across.
- ☐ **Layered raft:** Lay one layer of sticks one direction, then another layer the other direction. Lash them together.

As you build, think about whether your knots are tight, whether your raft is flat or wobbly, and where the weak spots are.

PART 3: TEST YOUR RAFT

Fill your basin or tub with water. Gently set your raft on the surface. Does it float? Does it stay flat or tip over? Does water come over the top?

Now test the limits. Add a pebble or coin. Does it still float? Add another, and another. How much can it hold before it sinks? Push down on one side. What happens?

If your raft sinks or tips, think about it. What went wrong? How could you fix it?

PART 4: IMPROVE YOUR DESIGN

Humans did not build perfect rafts on the first try. They watched what worked and what did not, then tried again. Look at your raft. What worked well? What could be stronger? Build a second raft using what you learned. Test them both and compare. Which held more cargo? Which stayed flatter?



Think Like a Historian

THINKING TOOL: THE TESTING CYCLE

The testing cycle is a way to check an idea when you are not sure about it.

It has five steps:

Observe: Notice what is happening.

Decide: Say what you think is happening.

Predict: Say what should happen if your idea is right.

Test: Go find out what happens.

Revise: Change your idea to fit what you found.

YOUR RAFT RAN THE CYCLE

1. Your first raft tipped over in the water. Was that a failure?

- ☐ Yes. A raft that tips is a failed raft.
- ☐ No. A tip is information. It shows you what to change.

2. Which step is happening when you set your raft on the water and add cargo to see what it holds?

- ☐ Observe
- ☐ Predict
- ☐ Test

3. Your raft tipped, so you moved the heavy cargo to the middle and built a new one. Which step is that?

- ☐ Decide
- ☐ Test
- ☐ Revise

4. The grandfather's raft was better than the ones his grandparents built, because each generation kept what worked and changed what did not. If every family had started over from nothing each time, would the rafts have kept getting better?

- ☐ Yes. Each family would invent the best raft on its own.
- ☐ No. The rafts got better because each generation built on what the last one learned.

5. Write it or say it.

When your first raft tipped, what did that tell you to change? How did testing your new raft show whether your change worked?



Words to Know

watercraft: Something people make to travel on water.

Draw a watercraft:

raft: One kind of watercraft, made flat from pieces tied together so they float as one.

What did you tie your raft together with?

innovation: A new idea or a new way of doing something.

The families built better watercraft over many lifetimes. Why was building better watercraft an important innovation?



Writing About History

In this lesson, you built and tested a raft, the way families in Sunda improved theirs over many lifetimes.

Complete each sentence to tell what happened earlier and what happened later.

Before the grandfather built the bigger raft, _____

After the family reached the new island, _____

Before each generation built new rafts, _____

After each generation built new rafts, _____

• *Before tells us what happened earlier. After tells us what happened later.*

Lesson 18:

The Cave of Animals



In This Lesson

- ☐ Read Lesson 18 in the Teacher's Guide
- ☐ The Animals of Chauvet Cave
- ☐ Time Travel Passport
- ☐ The Hand on the Wall
- ☐ Think Like a Historian
- ☐ Words to Know
- ☐ Writing About History

The Animals of Chauvet Cave

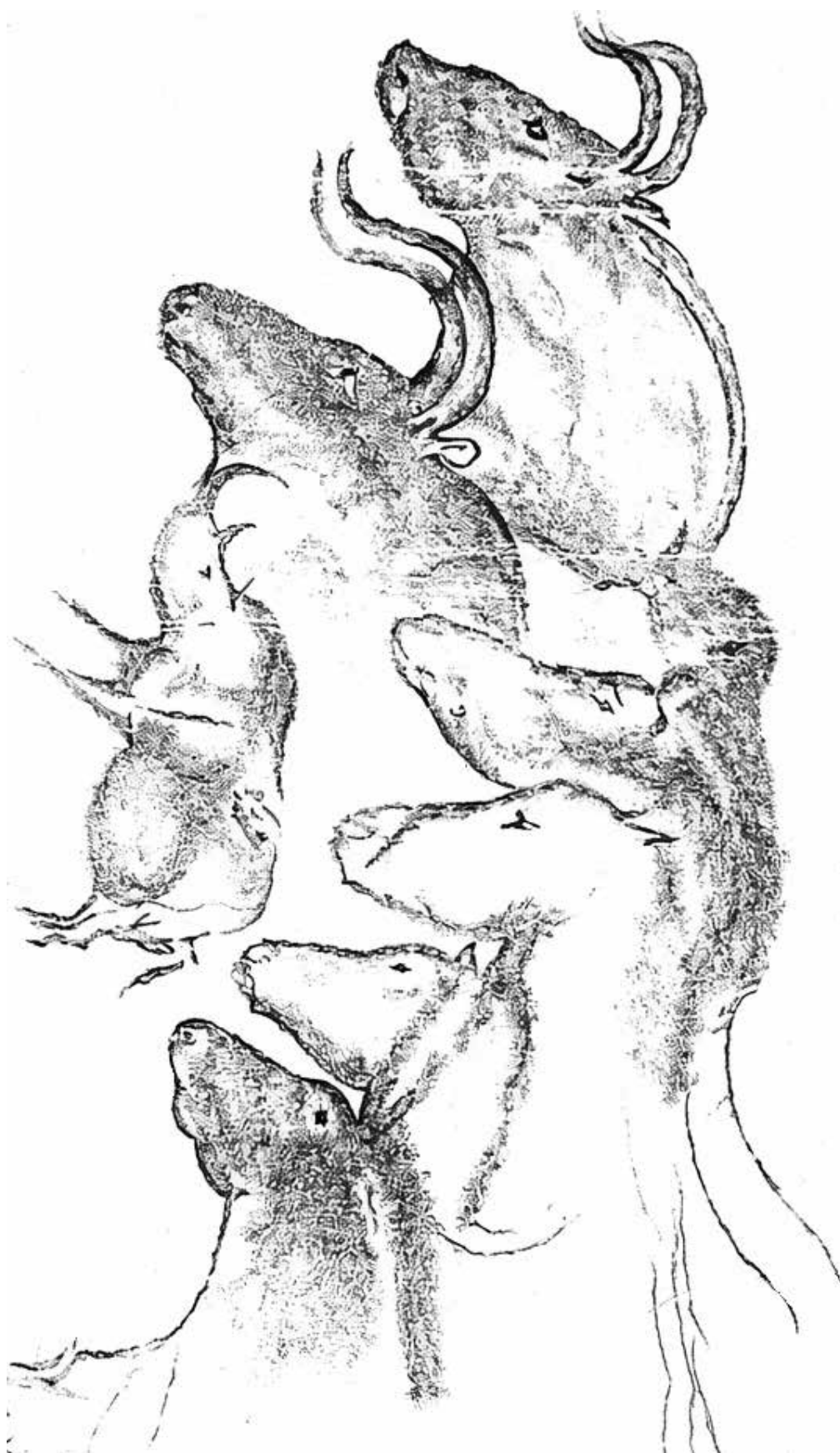
The painters of Chauvet Cave used red pigment in the chambers near the entrance and black charcoal deeper inside. Some animals were drawn in black. Others were drawn in red.

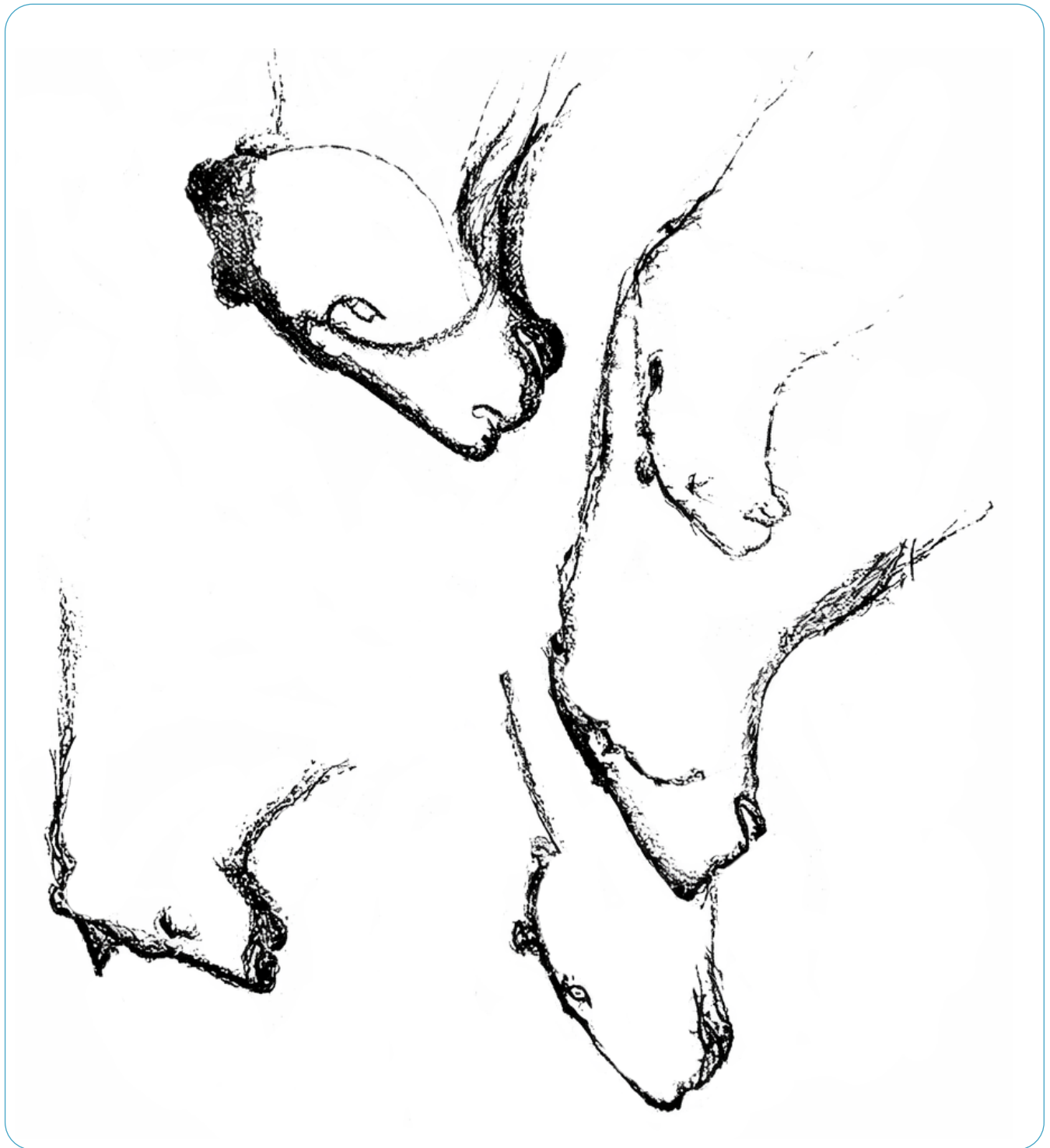
Color each animal with one of these color groups:

1. Black or dark brown to suggest charcoal
2. Red, orange, or reddish brown to suggest red pigment
3. If you want to show the warm light of a torch, add pale amber or golden yellow to the cave wall behind the animals.

When you finish, your page will use colors based on cave art humans made in southern France about 36,000 years ago.







The Hand on the Wall

At least 37,000 years ago, a person placed their hand flat against a cave wall in El Castillo, Spain, and sprayed red pigment around it. When the hand was removed, its shape remained. Scientists know that the stencil is at least 37,000 years old because they dated a thin layer of calcite that formed on top of it.

Today, you will make the same kind of hand shape.

MATERIALS

- ☐ A piece of tan, brown, gray, or cream paper
- ☐ Washable red or ochre-colored paint, or red chalk
- ☐ A small sponge, stiff brush, or cotton ball
- ☐ Tape
- ☐ Your hand

INSTRUCTIONS

1. Tape the paper flat. Place one hand on the paper with your fingers spread comfortably.

- ☐ If you are using paint: Pour a small amount of paint into a shallow dish. Dab paint around the outside edge of your hand with the sponge, brush, or cotton ball.
- ☐ If you are using chalk instead, shade outward from the edge of your hand with the side of the chalk.

2. Keep your hand still until the shape is complete. Then lift it straight up.

3. Let your stencil dry.

Scientists can measure ancient hand stencils and know that they are different sizes. Some scientists believe that the smaller stencils may have been made by children, but they cannot check the age of the person who made any one of them.

People made hand stencils in many places over thousands of years. Why do you believe people made this same kind of mark? Remember that your answer is a belief about its meaning, not something we can check.



Think Like a Historian

THINKING TOOL: KNOW IT OR BELIEVE IT?

Know means you have seen it, done it, or checked it.

Believe means you think it is true, but you have not checked.

What Cave Art Can and Cannot Tell Us

In this lesson, you colored animals based on Chauvet Cave and made a hand stencil based on one at El Castillo Cave. The marks and pigments still survive, but the people who made them did not leave words explaining why.

Some statements can be checked using the evidence that survives. Other statements are beliefs about what people thought or why they acted.

1. Write K beside each statement we can know and B beside each statement we can only believe.

- _____ The hand stencils at El Castillo Cave are different sizes.
- _____ The Chauvet artists used charcoal and red pigment.
- _____ The Chauvet artists painted animals to bring luck during a hunt.
- _____ Horses, cave lions, and rhinoceroses are painted on the walls of Chauvet Cave.
- _____ Some of the smaller hand stencils were made by children.
- _____ The people believed that the painted animals had spirits.

2. Choose one statement you marked K. What evidence can scientists examine to check it?

3. Historians may suggest possible reasons people made cave art. What must historians say when they share an explanation that cannot be checked?

4. Write it or say it.

Imagine that someone finds your hand stencil without any other information. Name one thing the stencil could help them know and one thing they could only believe.



Words to Know

charcoal: A soft black material left when wood burns but does not turn completely to ash. Chauvet artists used charcoal to draw and shade in black.

You rake out yesterday's fire and find soft gray powder and hard black lumps. Which one is the charcoal, and what happened to the wood that turned into powder?

ochre (review): A natural earth color that comes out of the ground. Ochre can be yellow, brown, or red.

The painters at Chauvet could make more charcoal whenever they had a fire. They could not make ochre. What did that mean they had to do to keep painting in red?

symbolic thinking (review): Using a mark, sound, or object to represent something else.

The word LION does not look like a lion. The painting at Chauvet does. Is one of them symbolic thinking, or both? Say why.



Writing About History

The sentences below describe the painters of Chauvet Cave and how their work survived.

Read the sentences in each group. One sentence is the topic sentence. Check it. The other sentences are details that support it.

GROUP 1: THE ART

- ☐ They used their fingers and a pad of soft material to spread the charcoal.
- ☐ The painters of Chauvet Cave were skilled artists.
- ☐ They scraped the wall smooth before they began to paint.
- ☐ They painted a lion with the suggestion of muscle beneath the skin.

GROUP 2: THE SURVIVAL OF THE PAINTINGS

- ☐ Rockfalls gradually closed the original cave entrance.
- ☐ The cave protected the paintings from sunlight and rain.
- ☐ The cave stayed sealed and dark for more than 20,000 years.
- ☐ Some paintings of Chauvet Cave have survived for about 36,000 years.
- ☐ A topic sentence tells what the paragraph is about.
- ☐ Detail sentences tell more about the topic sentence.

Lesson 21:

How Wolves Became Dogs



In This Lesson

- ☐ Read Lesson 21 in the Teacher's Guide
- ☐ How Wolves Became Dogs
- ☐ Time Travel Passport
- ☐ Reading Dog Language
- ☐ Think Like a Historian
- ☐ Words to Know
- ☐ Writing About History

How Wolves Became Dogs

DOG DOMESTICATION

Some wolves were less afraid of people and came closer to human camps. Those wolves were more likely to survive and have pups. Over many generations, wolves that lived alongside people changed. This process is called domestication. Dogs were the first domesticated animal.

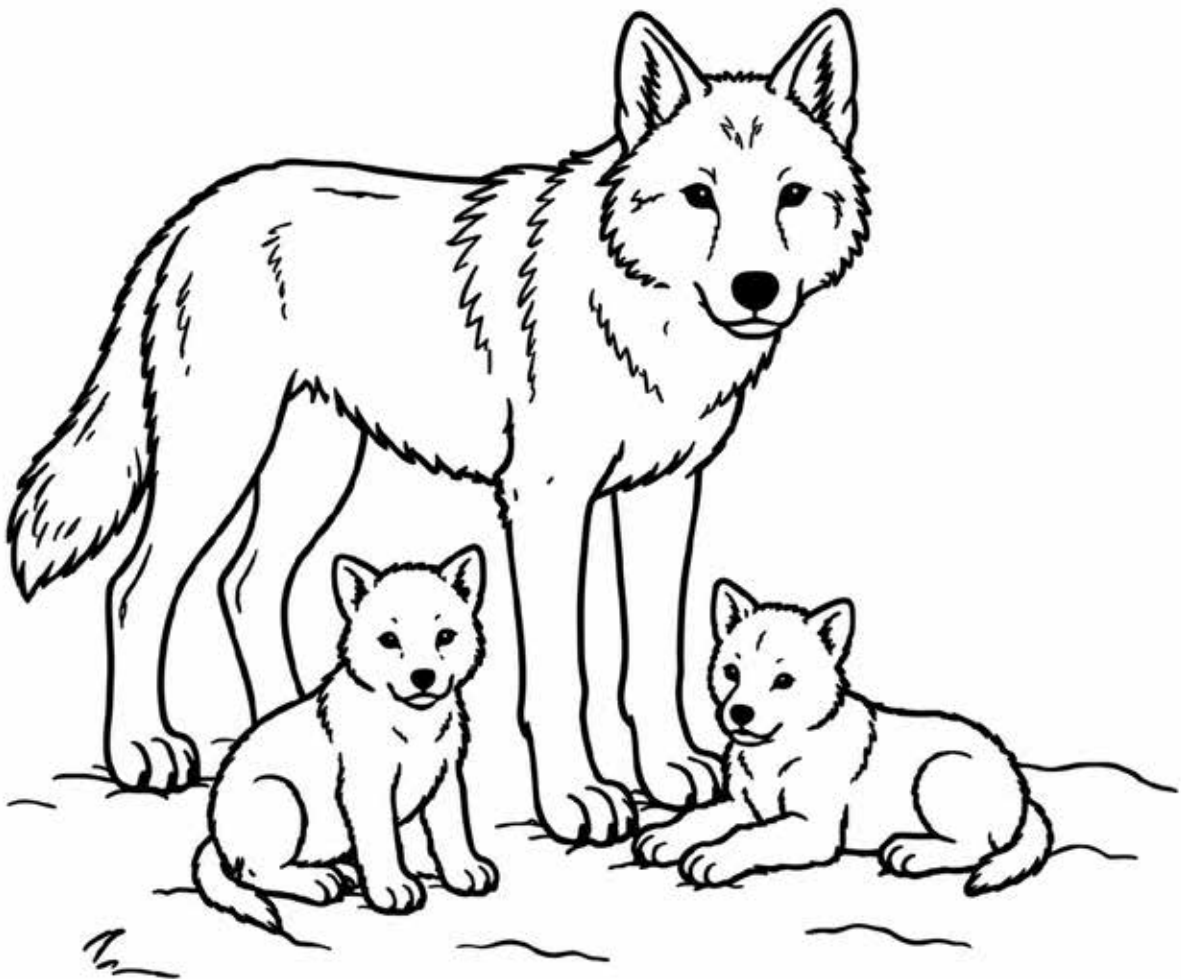
WOLVES MAY HAVE GAINED

Food, warmth, and safety.

HUMANS MAY HAVE GAINED

Warning of danger, help with hunting, and companionship.

Color the friendly wolf and her pups.



Reading Dog Language

Humans learned to read wolves: how they moved, what their sounds meant, and what their faces and bodies showed. Wolves learned to read humans too. After thousands of years living together, dogs became very good at reading human faces, and people became very good at reading dogs.

A dog talks with its whole body, not with one part at a time. One clue is never enough. A wagging tail does not always mean a happy dog.

Look at the whole dog. Then decide what to do.

What the whole dog is doing	What it might mean	What you do
Body loose, eyes soft, mouth relaxed, tail swinging in wide easy sweeps	The dog may be relaxed	Ask the owner first. Let the dog come to you.
Body turned toward something and still, ears forward, mouth closed	The dog may be interested in something else	Leave the dog alone. It is busy.
Body low or leaning away, tail low or tucked, licking lips, yawning, looking away, whites of the eyes showing	The dog may be worried	Move away. Do not follow it.
Stiff or frozen, hard stare, growling, lips pulled back	The dog is asking for space	Stop. Back away slowly. Tell an adult.

For each dog, look at:

- ☐ What clues do you notice?
- ☐ What might they mean together?
- ☐ What should a person do?

Then think:

- ☐ Why would it help a hunter-gatherer to know what a wolf was feeling?
- ☐ Why would it help a wolf to know what a person was feeling?



Think Like a Historian

THINKING TOOL: CAUSE AND EFFECT

A cause is what makes something happen. An effect is what happens because of it. When one effect becomes the cause of the next thing, they form a chain.

HOW DID WE GET POODLES FROM WOLVES?

You are walking through the park, and every dog you pass looks different. You see a squat pug, a fluffy poodle, a shaggy sheepdog, a gray husky. You realize that every one of them came from ancient wolves. No wolf looks like a pug. So how did that happen? No one sat down and decided to build a pug. It happened through domestication, as a chain, with one small cause leading to the next, over a very long time.

1. Four things happened, but they are scrambled. Put them in order to build the chain.

- ___ The calmer wolves survived better and had more pups.
- ___ Some wolves were born calmer and less afraid than others.
- ___ Those pups were born calmer too, like their parents, and it started again.
- ___ The calmer wolves came close to camp, where they found scraps of food.

2. A hunter in the story said, “We chose each other.” Why does that describe it better than “people tamed the wolves”?

- ☐ Both sides changed: People kept and fed the calm wolves, and the wolves warned the camp and helped hunt, so each one shaped the other.
- ☐ One hunter caught a wolf and turned it into a dog during that wolf's life.

3. Much later, people kept choosing: Some kept the best hunters, some the best guards, some the smallest lap dogs. Over many generations, what did all that choosing lead to?

4. Write it or say it.

Back in the park, a friend says, “A long time ago, someone must have caught a wolf and turned it into a poodle.” Using the chain, tell them what really happened, step by step.



Words to Know

domestication: When people and animals live closely together for many generations, and people help choose which animals survive and have young, the animals slowly change. Dogs were the first domesticated animal.

Your family raises a wolf pup from the day it is born, and it grows up gentle and calm. A friend says your family has finished domestication. Use domestication to explain why your friend is wrong.

atlatl (AT-lat-ul): A spear-thrower: a short handle with a hook that holds a dart. Used like an extra length of arm, it sends the dart farther and faster than a spear thrown by hand.

You are hunting a large animal on open ground, and there is no cover to hide behind. Explain why you would carry an atlatl instead of only a hand-thrown spear.

Last Glacial Maximum: The coldest stretch of the last Ice Age, from about 26,500 to 19,000 years ago, when the ice sheets grew to their largest during this time and a great deal of the world's water was locked into ice.

You dig at a camp in northern Europe. People left things there before the Last Glacial Maximum and after it, but nothing during it. Use Last Glacial Maximum to explain where those families most likely went, and why.



Writing About History

The sentences below come from the story of how wolves and people became partners.

Combine each pair of sentences into one sentence using and.

Wolves watched the camp. Wolves waited for scraps.

The girl watched Shadow. The elder watched Shadow.

The dog helped the hunters. The dog trotted back to camp.

Wolves changed because of their partnership. Humans changed because of their partnership.

- *And can join two actions done by the same subject. Name the subject once: Wolves watched and waited.*
- *And can join two subjects doing the same action: The girl and the elder watched.*

Lesson 32:

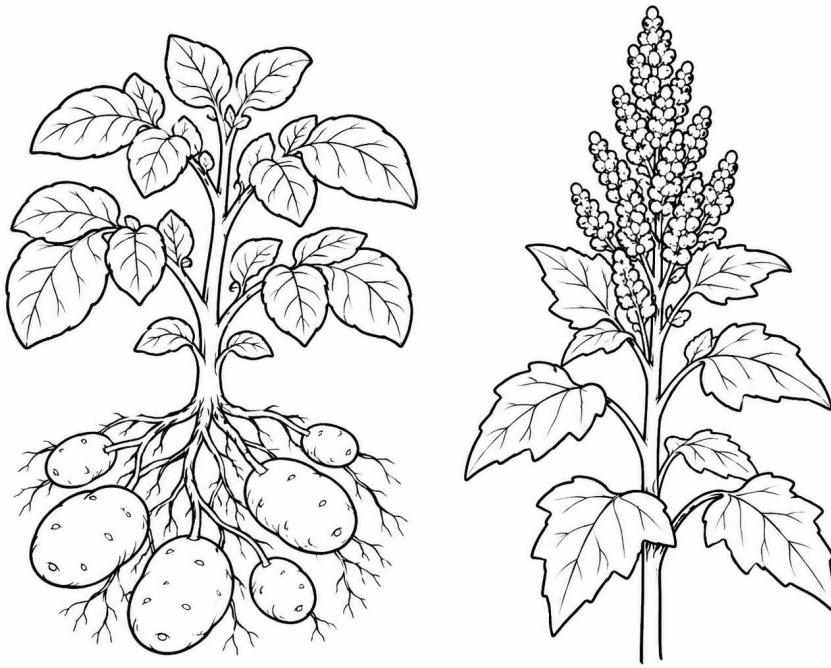
Farming at Altitude



In This Lesson

- ☐ Read Lesson 32
- ☐ Potatoes and Quinoa in the Andes
- ☐ Time Travel Passport
- ☐ Lemon-Lime Quinoa Vegetable Bowl
- ☐ Pastel de Papa
- ☐ Think Like a Historian
- ☐ Words to Know
- ☐ Writing About History

Potatoes and Quinoa in the Andes



Where did potatoes and quinoa originally come from?

What conditions do potatoes and quinoa need to grow well?

When did people first begin cultivating or domesticating potatoes and quinoa?

Where are potatoes and quinoa grown today?

How many native potato varieties grow in the Andes today?

Lemon-Lime Quinoa Vegetable Bowl

INGREDIENTS

- ☐ 1 cup quinoa
- ☐ 2 cups water or vegetable broth
- ☐ $\frac{1}{2}$ teaspoon salt
- ☐ 1 tablespoon olive oil
- ☐ 1 cup corn, peas, diced cucumber, diced tomato, or chopped bell pepper
- ☐ $\frac{1}{2}$ cup cooked black beans or lentils, optional
- ☐ 2 tablespoons lemon or lime juice
- ☐ 1 tablespoon chopped parsley or cilantro, optional
- ☐ $\frac{1}{4}$ teaspoon cumin, optional

DIRECTIONS

1. Rinse the quinoa in a fine strainer.
2. Put quinoa, water or broth, and salt in a pot.
3. Bring to a boil.
4. Turn heat to low, cover, and cook for 15 minutes.
5. Turn off heat and let sit, covered, for 5 minutes.
6. Fluff with a fork and let it cool slightly.
7. Stir in olive oil, lemon or lime juice, vegetables, beans or lentils, and cumin if using.
8. Serve warm or chilled.

Quinoa still grows high in the Andes, where the girl's family harvested it. This is a modern dish, not an ancient recipe, but it shows how those tiny seeds can become a filling meal.

Pastel de Papa

INGREDIENTS

- ☐ 6 medium yellow potatoes, Yukon Gold type, peeled and cut into chunks
- ☐ 2 tablespoons butter
- ☐ $\frac{1}{2}$ cup milk (more as needed)
- ☐ $1\frac{1}{2}$ cups shredded mild cheese (mozzarella, Monterey Jack, or similar)
- ☐ 2 hard-boiled eggs, sliced (optional but traditional)
- ☐ Salt and pepper to taste
- ☐ 1 egg yolk, beaten with 1 teaspoon water (for brushing the top, optional)

DIRECTIONS

1. Boil the potatoes in salted water until very tender, 15 to 20 minutes. Drain well.
2. Mash with butter and milk until smooth and creamy, softer than stiff mashed potatoes. Season with salt and a little pepper.
3. Heat oven to 350 degrees Fahrenheit.
4. Grease a small baking dish, about 8 by 8 inches.
5. Spread half the mashed potatoes in the bottom.
6. Add a layer of sliced hard-boiled eggs, if using, and then about half the cheese.
7. Cover with the remaining mashed potatoes and smooth the top.
8. Sprinkle the rest of the cheese on top.
9. Brush the top lightly with beaten egg yolk, if using, for extra color.
10. Bake 25 to 30 minutes, until the top is lightly golden and the cheese is melted and bubbly around the edges.

Pastel de papa is a layered potato bake eaten in Peru. It is a modern dish, not an ancient recipe, but the potato at the center of it was first grown in the mountains you just visited.



Think Like a Historian

THINKING TOOL: EVIDENCE

Evidence is a clue that helps answer a question. Before a scientist digs, they decide what would count as a clue. Knowing what to look for is half the work.

WHAT WOULD YOU LOOK FOR?

You are a researcher studying the domestication of llamas from wild guanacos in the Andes. You already know how the story ends. Today there are llamas living with people, and there are still wild guanacos out on the grassland. What you want to know is when people began keeping them, and how you could ever tell.

The change took many lifetimes. No one alive ever watched a guanaco become a llama. So you cannot go looking for the moment it happened. You have to work out what a slow change leaves behind, and then go and find it.

1. You want to dig up the moment guanacos became llamas. Why is that the wrong thing to look for?

- ☐ The moment happened, but all the evidence for it was destroyed.
- ☐ The change happened over many lifetimes, so there was never a single moment to find.

2. Which clue would be much more likely to be left by animals kept together by people than by a wild herd?

- ☐ Bones of animals that people hunted.
- ☐ Hoofprints in soft ground.
- ☐ Thick beds of dung packed in one place, where animals were penned close together.

3. In dry caves high in the Andes, scientists find exactly that: thick, packed beds of dung. Why does it matter that the caves are dry?

- ☐ Dung is only made by animals that live in dry places.
- ☐ Dry ground keeps the dung from rotting away, so it can last thousands of years.

4. You also find a low wall of stones. On its own, what does it tell you?

- ☐ Not much by itself. A wall could hold animals, but it could do other jobs too. It becomes strong evidence when the dung is found with it.
- ☐ It proves people were keeping animals, because walls are only ever built to hold animals.

5. Write it or say it.

You are writing to another researcher who is about to start digging. Tell them what to look for to show that people in the Andes were keeping animals, and explain why one clue on its own would not be enough.



Words to Know

altitude: The height of the land above the sea.

Two fields sit the same distance from the equator. One is high on a mountain and one is down in a valley. Say which is colder, and explain what altitude has to do with it.

puna: A high, cold grassland with no trees, near the tops of the mountains.

You need wood for a fire and you are standing on the puna. Say what you will have to do, and why.

quinoa: A plant grown high in the Andes for its tiny seeds, which keep well through the cold months.

The cold months come and almost nothing is growing. Explain why a family is glad they harvested quinoa.

vicuña (vih-KOO-nyah): A wild animal of the high Andes with very fine, soft wool. The larger wild kind is the guanaco.

Vicuñas are wild and they run from people. Name one problem a family would have getting wool from a wild vicuña that they would not have with an animal that lived alongside them.



Writing About History

The details below describe how the people of the Andes used the mountains, from the high puna down to the warm valleys.

Read the topic sentence and the list of details. Some of the details belong with the topic sentence, and some do not. Choose the three that belong. Then use them to write a paragraph.

Topic sentence: The people of the Andes used each height of the mountains in a different way.

Details:

- ☐ Vicuñas have very fine, soft wool.
- ☐ They grazed animals on the high grass.
- ☐ The air high in the mountains is colder.
- ☐ They grew hardy potatoes high on the cold slopes.
- ☐ They brought wood and wild passionfruit from the warm valleys below.

Write a paragraph that begins with the topic sentence and uses the three details you chose.

[illegible]

- *The two details you left out are true, but they do not back up the topic sentence.*
- *Noticing the difference between a detail that is true and a detail that fits your point is an important writing skill.*