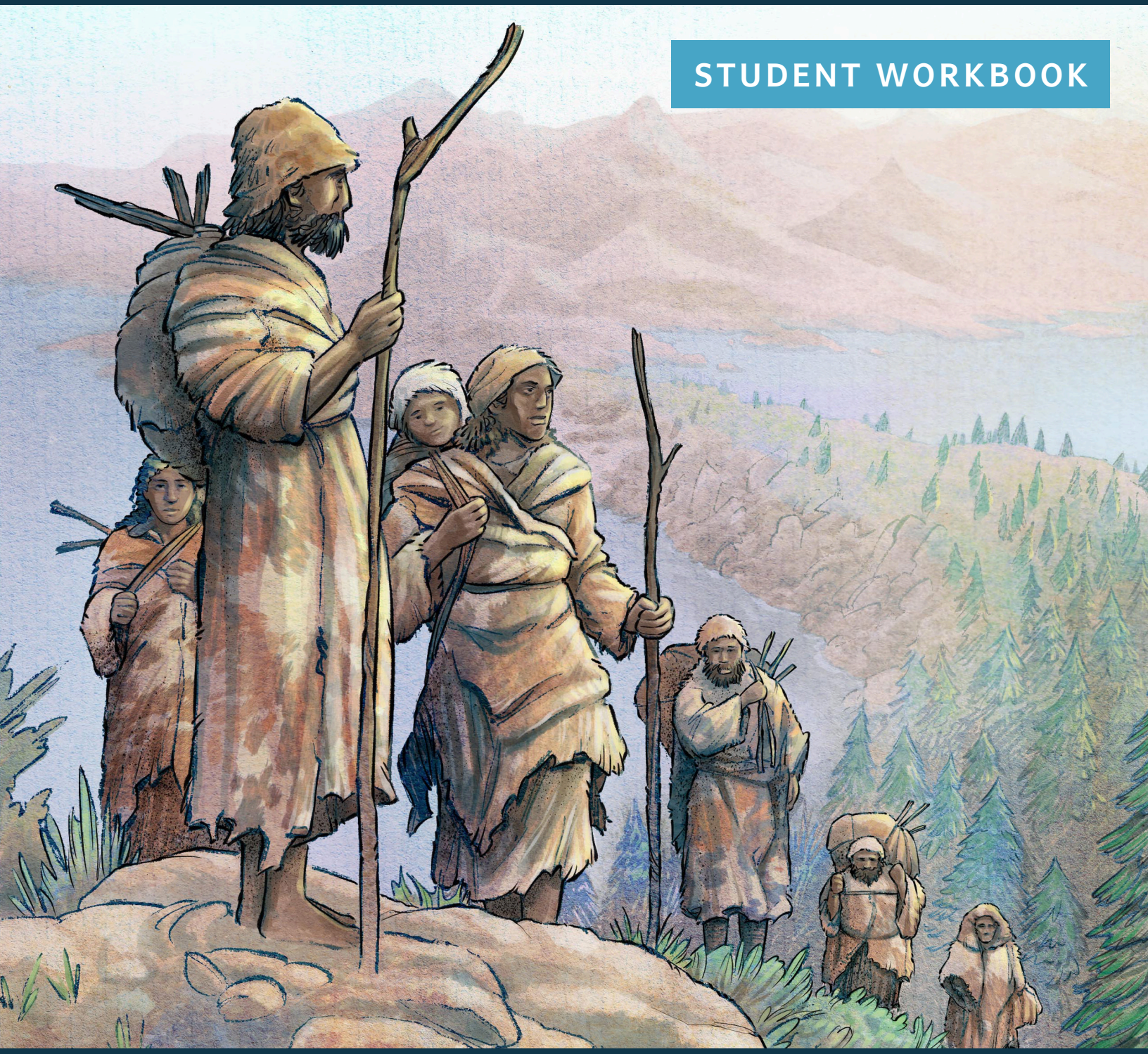
THE HISTORIAN'S TOOLKIT, YEAR 1

One Family, Many Stories

A Global Journey through Deep Human History

STUDENT WORKBOOK



By Dr. Sherri Mehta and Blair Lee, M.S.
With Contributions from Dr. Amy Sharony

SEA Publishing

THE LEARNER'S TOOLKIT

THE LEARNER'S TOOLKIT SERIES

The Historian's Toolkit

Year 1

One Family, Many Stories

A Global Journey Through Deep History

SEA Publishing

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The Learner's Toolkit is a series of evidence-based curricula built on Hochman Method principles of explicit, scaffolded instruction. Each toolkit provides systematic teaching that respects both child development and parent/teacher capabilities.

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Other Books by Sherri Mehta

Freedom Fighters, Freedom Writers: Lives, Letters, and Service, Unit Study and Course Workbook

This book is dedicated to all of your ancestors who came before you, so that you could be here now learning their history!

Our thanks as well to Bobbie Johnson, Kat Hutcheson, and Tiffany Petty for their careful feedback and generous support along the way.

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With Contributions from Amy Sharony

Amy Sharony was a historian, educator, and curriculum writer who founded and edited home|school|life magazine. She authored The A+ Homeschool Planner and taught history, literature, and philosophy. Her work promoted inclusive, rigorous history education that deepened understanding, strengthened critical thinking, and helped learners understand migration and change over time. Amy believed that education could help create a more just and generous world. Her light shines through these pages.

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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 what questions to ask about them.

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. 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.

UNIT 1:
History Starts With You

Lesson 1:
History Starts with You

In This Lesson

- ☐ Read Lesson 1 in the Text
- ☐ 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

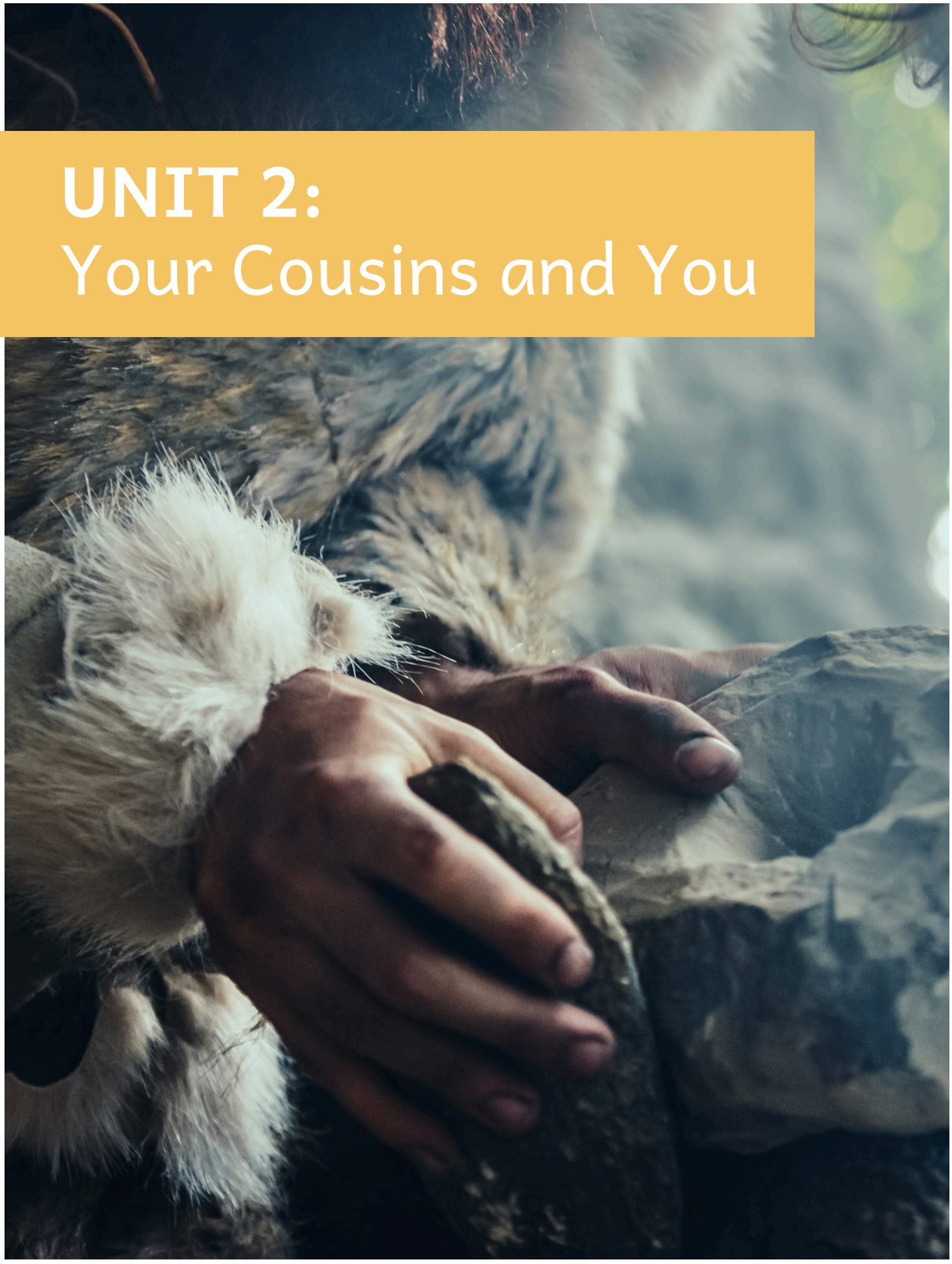
history: The story of what happened in the past.

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:

UNIT 2:
Your Cousins and You



Lesson 5:
Fire Keepers

In This Lesson

- ☐ Read Lesson 5 in the Text
- ☐ Time Travel Passport
- ☐ The Journey Map
- ☐ Faces of the Past
- ☐ Think Like a Historian
- ☐ Words to Know
- ☐ Writing About History

The Journey Map

A BIG QUESTION

You visited a family of *Homo erectus* at Gesher Benot Ya'aqov. But *Homo erectus* and other humans did not stay in one place forever.

How did humans spread to so many places?

The answer: many long journeys.

No one made the whole journey at once. Families moved a little at a time. Children grew up, had children of their own, and those children moved farther still. After many, many generations, humans had spread across parts of Africa and Asia.

Mark your map

On the map on the next page, find the dot indicating where each place is, and draw a star.

- ☐ **East Africa**, Lake Turkana, Kenya: *Homo erectus* fossils, including Turkana Boy.
- ☐ **South Africa**, Wonderwerk Cave: very old evidence of fire use.
- ☐ **Georgia**, Dmanisi: *Homo erectus* fossils outside Africa.
- ☐ **Southwest Asia**, Gesher Benot Ya'aqov: evidence that humans controlled fire.
- ☐ **China**, Zhoukoudian, Dragon Bone Hill: an important *Homo erectus* site in East Asia.
- ☐ **Java**, Trinil: a famous *Homo erectus* fossil site.
- ☐ **Spain**, Atapuerca: where *Homo antecessor* lived, a different kind of human.

Now add a red flame next to the three fire sites: **Wonderwerk Cave, Gesher Benot Ya'aqov, Zhoukoudian.**

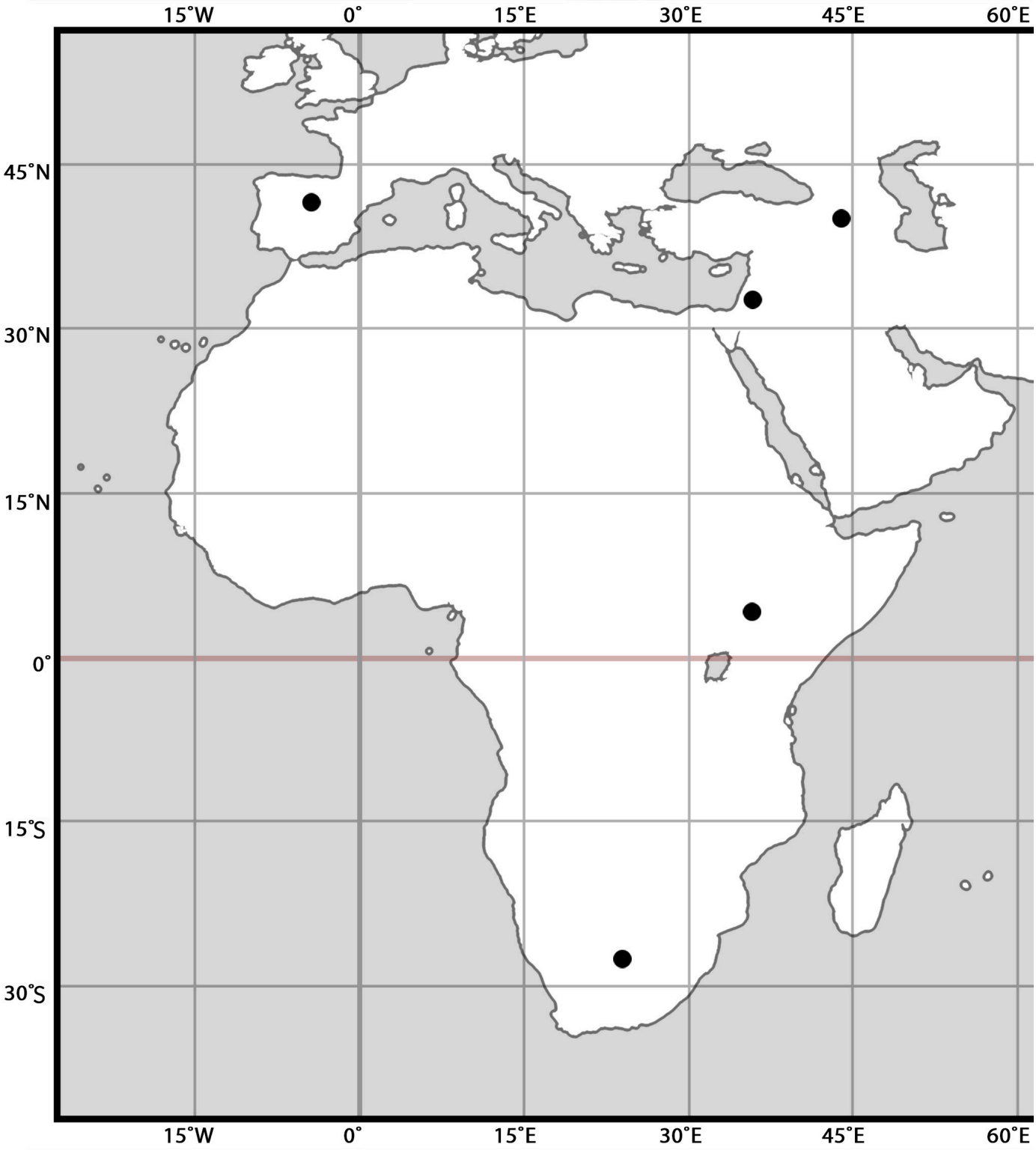
Turn your crayon on its side and gently shade the land between the stars. Be careful not to shade the ocean. The shaded area does not show one path. It shows many journeys over many generations.

Faces of the Past

There are seven pictures of extinct humans. Six are *Homo erectus*. One is a different kind of human, called *Homo antecessor*.

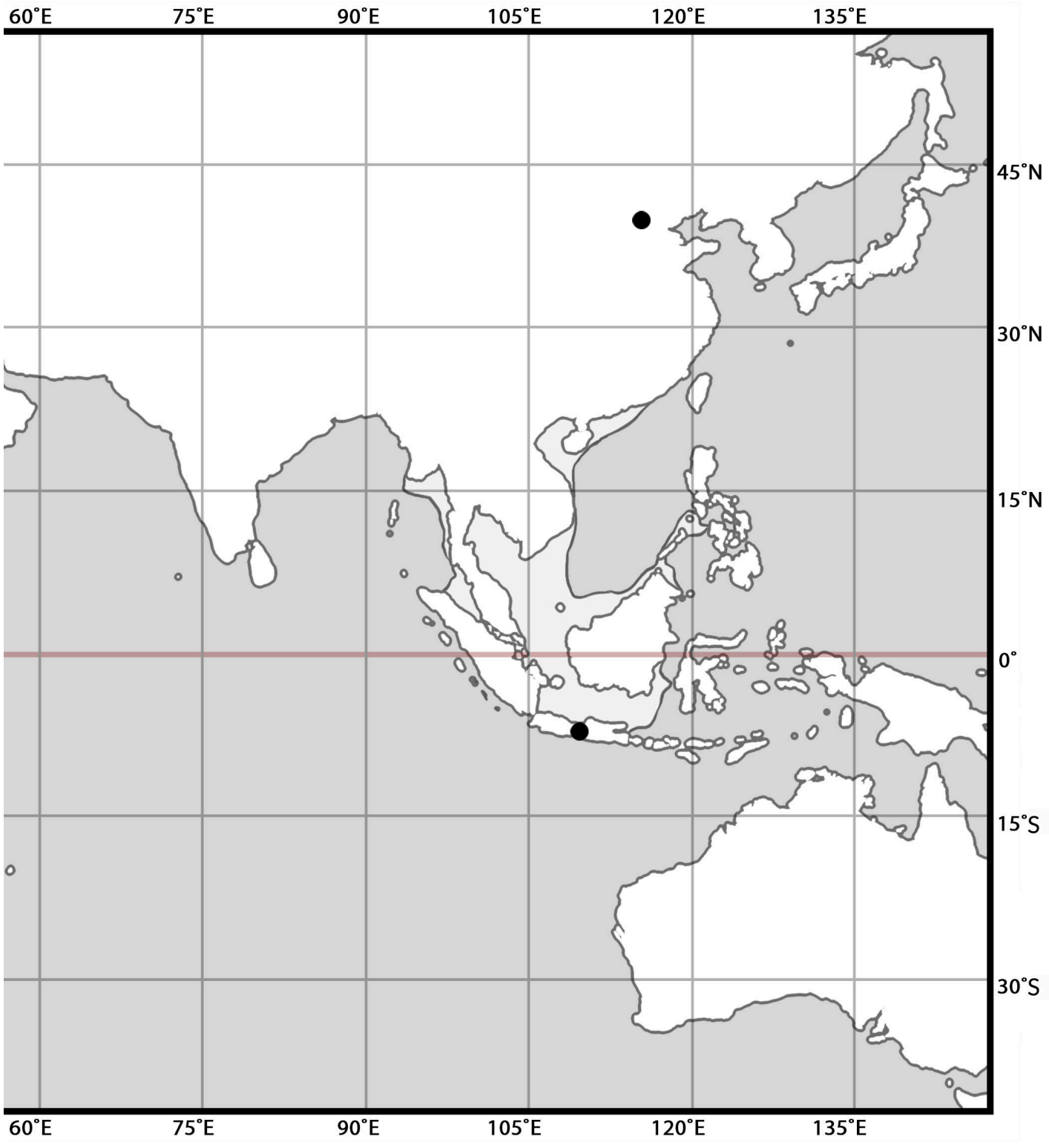
Homo erectus

Homo antecessor



These are artist reconstructions based on fossils scientists have found. They show one careful idea of what these humans may have looked like.

1. Cut out each picture along the dotted lines. A removable copy of the faces is in the back of the Teacher's Guide.
2. Go back to your Journey Map.
3. Glue the six *Homo erectus* faces next to the six *Homo erectus* stars.
4. Glue the *Homo antecessor* face next to Atapuerca in Spain.
5. Look at your finished map. Around the world, there was more than one kind of human alive long ago.



Words to Know

***Homo erectus*: A kind of human. The name means "upright human." *Homo erectus* first appeared almost 2 million years ago.**

You met Lucy in Lesson 3, and she walked upright too, long before *Homo erectus*. So "upright human" does not tell you what made *Homo erectus* different. Name one thing from this lesson that did.

---

hearth: A fireplace that people made and kept on purpose. Long after the fire is out, a hearth leaves traces in the ground: burned stones, ash, and charcoal.

Draw a hearth that *Homo erectus* might have built.

Writing About History

In this lesson, you met *a* family of *Homo erectus* keeping *a* fire beside *a* lake.

Add the details each sentence asks for. Then, write an expanded sentence that includes the details.

They were cold there.

who: _____

where: _____

_____

_____

- *Who asks about a person.*
- *The names of people and places are proper nouns. Proper nouns start with a capital letter.*

To stay warm, *Homo erectus* used it.

what: _____

_____

_____

- *What asks about a thing or an action.*

Turn this into a question using either who or what.

Homo erectus learned to control fire.

_____

_____

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

UNIT 3: Great Journeys

Lesson 12:
Journey Out of Africa

In This Lesson

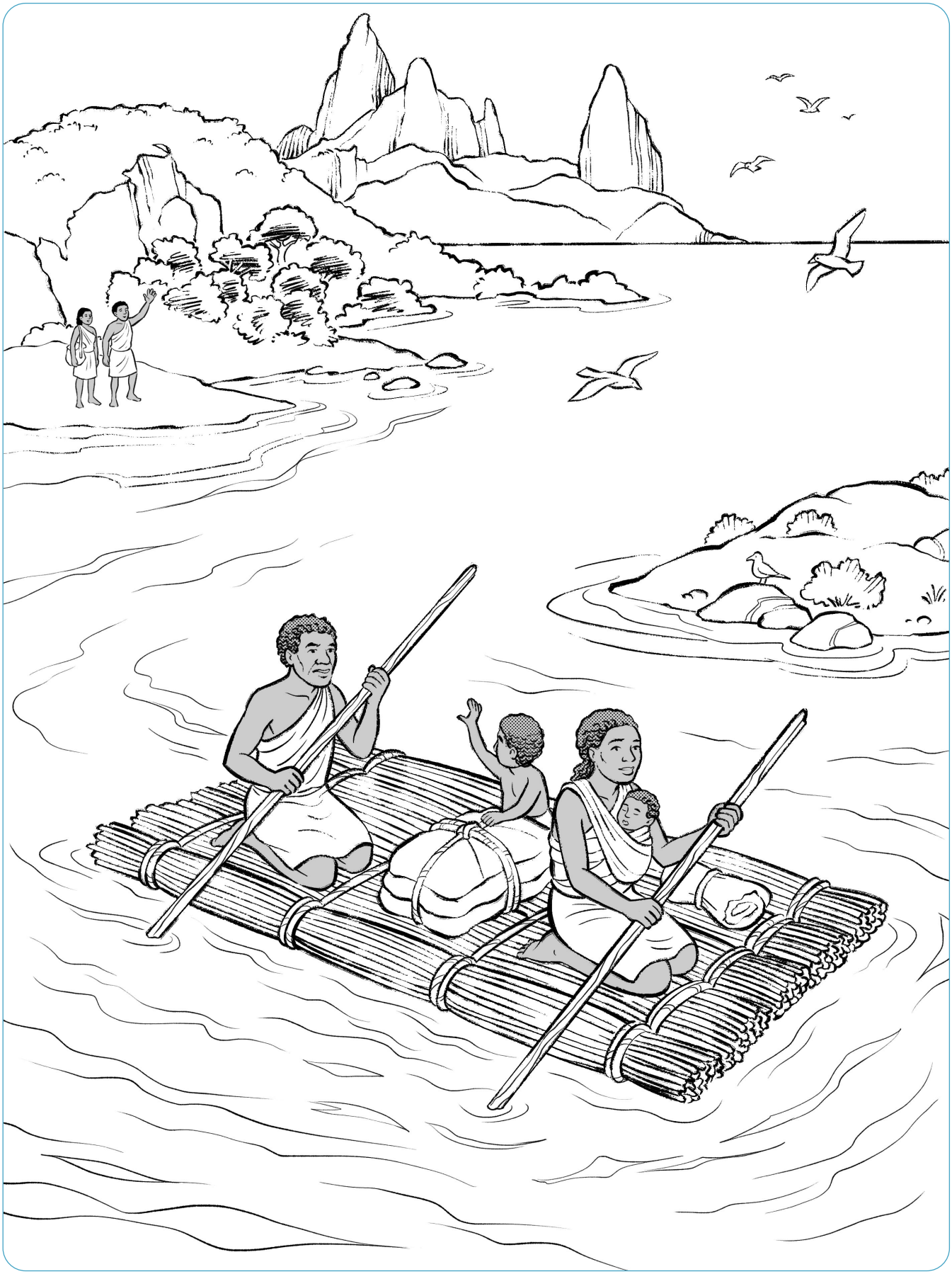
- ☐ Read Lesson 12 in the Text
- ☐ Leaving Africa
- ☐ Where in the World?
- ☐ Time Travel Passport
- ☐ History Mystery: Why Cross Here?
- ☐ Think Like a Historian
- ☐ Words to Know
- ☐ Writing About History

Leaving Africa

This picture shows a family crossing from East Africa toward Arabia about 70,000 years ago. The ocean was much lower then, so the crossing was narrower than it is today. Perim Island and the Sawabi Islands sat in the water like stepping stones.

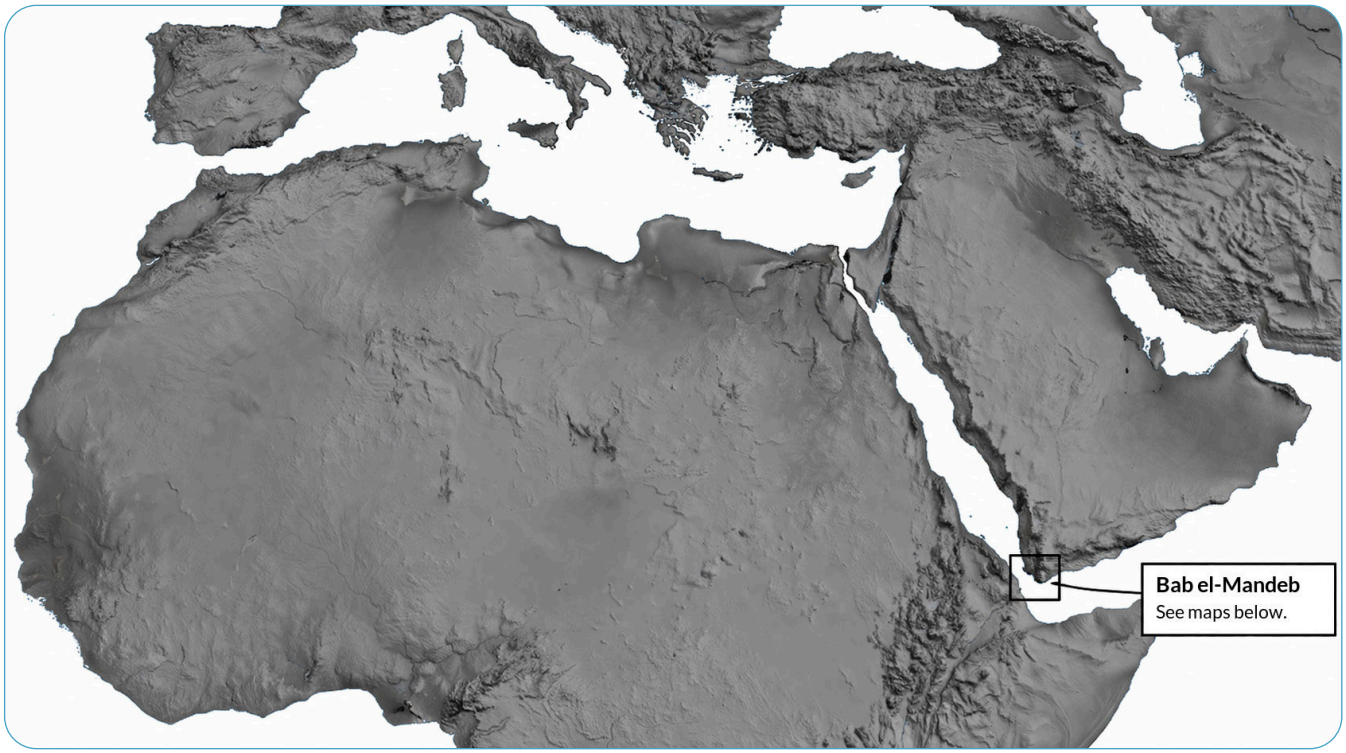
What to do:

- ☐ Color the water blue.
- ☐ Color the land and islands brown and green.
- ☐ Color the sky and add more seabirds if you like.
- ☐ Color the raft and the family's clothes and bundles.



Where in the World?

Look at the large gray map.



1. Find and label **Africa**, the large landmass on the left that fills most of the map.
2. Find and label **Arabia**, to the east.
3. The small rectangle near the bottom marks **Bab el-Mandeb**, one southern crossing point scientists study.

Now look at the two close-up maps on the next page. Both show the area inside the rectangle, zoomed in close. One shows what it likely looked like about 70,000 years ago. The other shows what Bab el-Mandeb looks like today.

4. On both maps, find East Africa, Arabia, Perim Island, and the Sawabi (Seven Brothers) Islands.

Compare the two maps.

5. How does the width of the water between East Africa and Arabia change from the "today" map to the "70,000 years ago" map?

_____

6. The Sawabi (Seven Brothers) Islands appear on both maps. How do they look different? Think about the ocean-levels lab from the last lesson. What could explain the change in the islands, the coastline, and the distance between East Africa and Arabia?

_____

_____

70,000 years ago

Today

History Mystery: Why Cross Here?

Long ago, the Earth went through several ice ages, times when the Earth was much colder for thousands of years. The most recent one is the ice age covered in this book, and we call it the Ice Age. In an Ice Age, huge sheets of ice called glaciers spread across the land. Glaciers are made of frozen water.

So much water was frozen into glaciers that there was less water left in the ocean. The sea level, which is how high the ocean reaches against the land, dropped far below where it is today.

When the ocean dropped, land that had been underwater rose into the open air. New paths appeared between places that are separated by water now.

Scientists know that a lasting movement of *Homo sapiens* out of Africa happened around this time, because of clues in DNA. This lesson follows one route scientists study: the southern crossing at Bab el-Mandeb. The mystery is not *whether* people left Africa. The mystery is *which route* they took, and *why*.

The facts: At lower sea levels, the crossing was much shorter than it is today. With Perim Island and the Sawabi Islands as stepping stones, the crossing was difficult but possible. On clear days, families may have been able to see land or islands from the African shore. A northern route existed, but it was much longer, and it passed through dry country where water and food could be hard to find.

Here is what some scientists think may have made the southern crossing possible. Nobody knows for certain which reason mattered most, or whether they all worked together. **Check the box next to one or more reasons you find most convincing.**

- ☐ **The crossing was short.** Lower sea levels brought East Africa and Arabia closer together, and the islands rose higher as stepping stones. From the African shore, families could see land on the other side.
- ☐ **The coast had food.** Along the sea there were fish, shellfish, and animals to gather. The shore across the water was a coast too, so it would hold food of its own.
- ☐ **They already knew this coast.** Coastal families had lived and moved along the Red Sea shore for generations. Crossing may have felt like following the coast one step farther than they had gone before.
- ☐ **They could see the way.** From high points on the shore, the islands and the high ground of Arabia could be seen on a clear day. People move toward what they can see.

WHAT WOULD YOU DO?

Imagine you are living on the East African coast 70,000 years ago. You can see land across the water. Your family has a raft. The northern route is desert. The crossing is short, but the water is deep and the current is strong.

Which reason above makes the most sense to you? Talk it over, then write your answer.

I think the families crossed at Bab el-Mandeb because _____

_____

_____

Think Like a Historian

THINKING TOOL: FACT AND INTERPRETATION

A fact is something you can see, hear, measure, or check.
An interpretation is what you decide a fact means.

Two careful people can look at the same facts and reach different interpretations.

WHAT DNA SETTLES, AND WHAT IT DOES NOT

Scientists read DNA from people all over the world. The DNA shows clear threads that lead back to Africa, and everyone who checks the DNA finds the same threads. But DNA does not show which path the families walked, or why they chose it.

1. "A lasting movement of people out of Africa happened around this time." Is this a fact or an interpretation?

- ☐ Fact
- ☐ Interpretation

2. "The families crossed at Bab el-Mandeb because the crossing was short and they could see the other side." Is this a fact or an interpretation?

- ☐ Fact
- ☐ Interpretation

3. In the History Mystery, you picked one reason the families may have crossed. Could another careful person read the same clues and pick a different reason?

- ☐ No. There is only one right reason.
- ☐ Yes. The clues do not point to just one reason, so careful people can reach different ones.

4. Scientists find a brand-new clue. Which part of the story could change?

- ☐ Whether people left Africa at all.
- ☐ Which route they took, and why.

5. Write it or say it.

How can you tell the fact (people left Africa) apart from the interpretation (which way they went)?

Words to Know

These three words are explained in the History Mystery box.

ice age: A time when the Earth was much colder for thousands of years. Earth has had several.

Say one thing that would be different where you live during an ice age.

glacier: A huge sheet of ice that spreads across the land. Glaciers are made of frozen water.

Draw a glacier:

sea level: How high the ocean reaches against the land.

When more water freezes into glaciers on land, does sea level rise or fall?

Today, Earth is warming. Are sea levels rising or falling?

Writing About History

In this lesson, you crossed at Bab el-Mandeb, where lower seas made the water narrow enough to cross.

Add the details the sentence asks for. Then, write the expanded sentence.

The families crossed the water.

why: _____

_____

how: _____

_____

_____

Complete the sentence.

Scientists know that many people living outside Africa today trace part of their ancestry to those travelers because _____

_____

_____

_____

Fix the fragment. Add a who or a what or an action.

Left Africa.

_____

UNIT 4: Finding Home

Lesson 18:
The Cave of Animals

In This Lesson

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

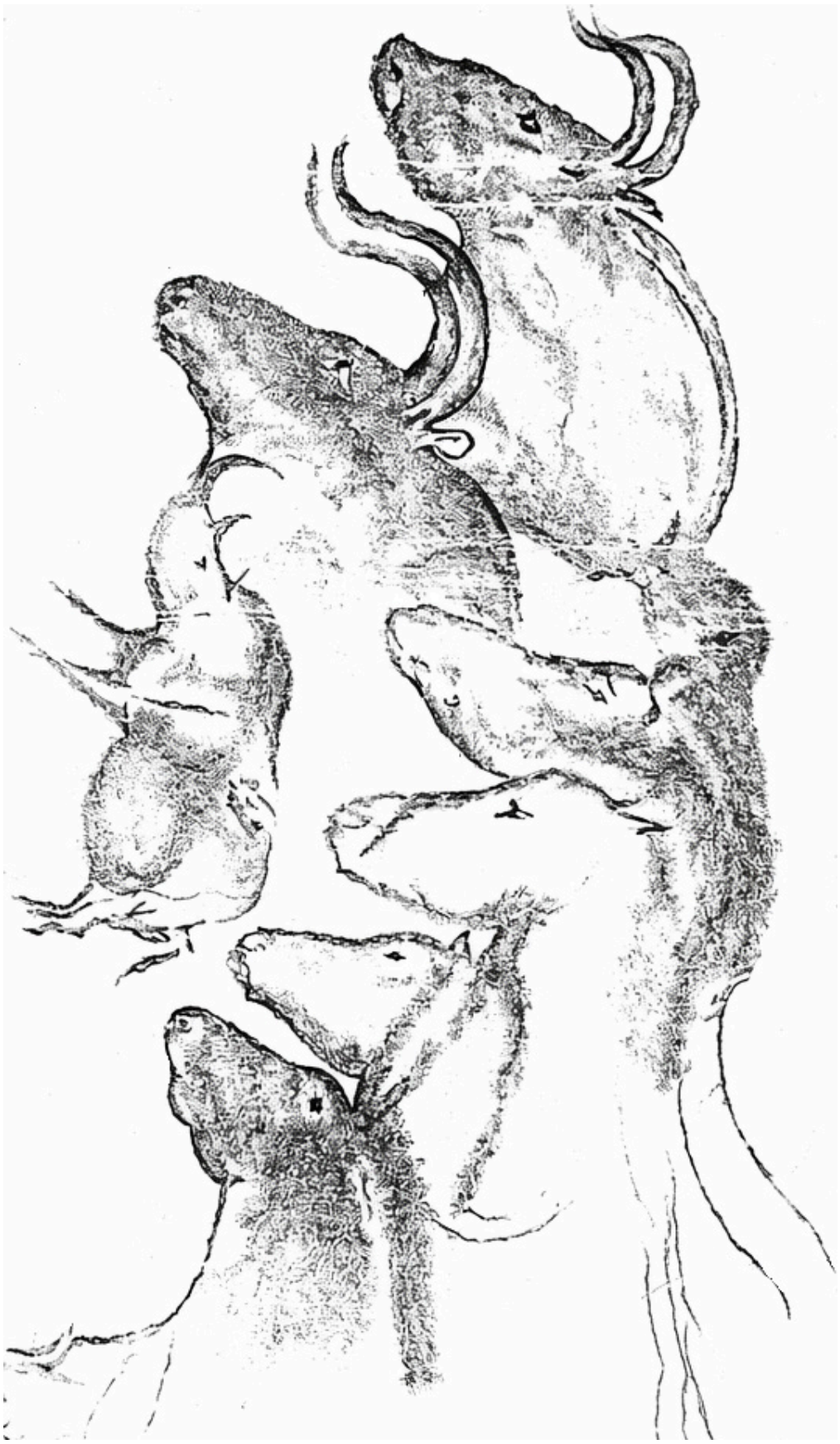
The Animals of Chauvet Cave

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.

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, a sound, or an object to stand for something.

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 in Chauvet Cave have survived for 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 Text
- ☐ 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 animals.

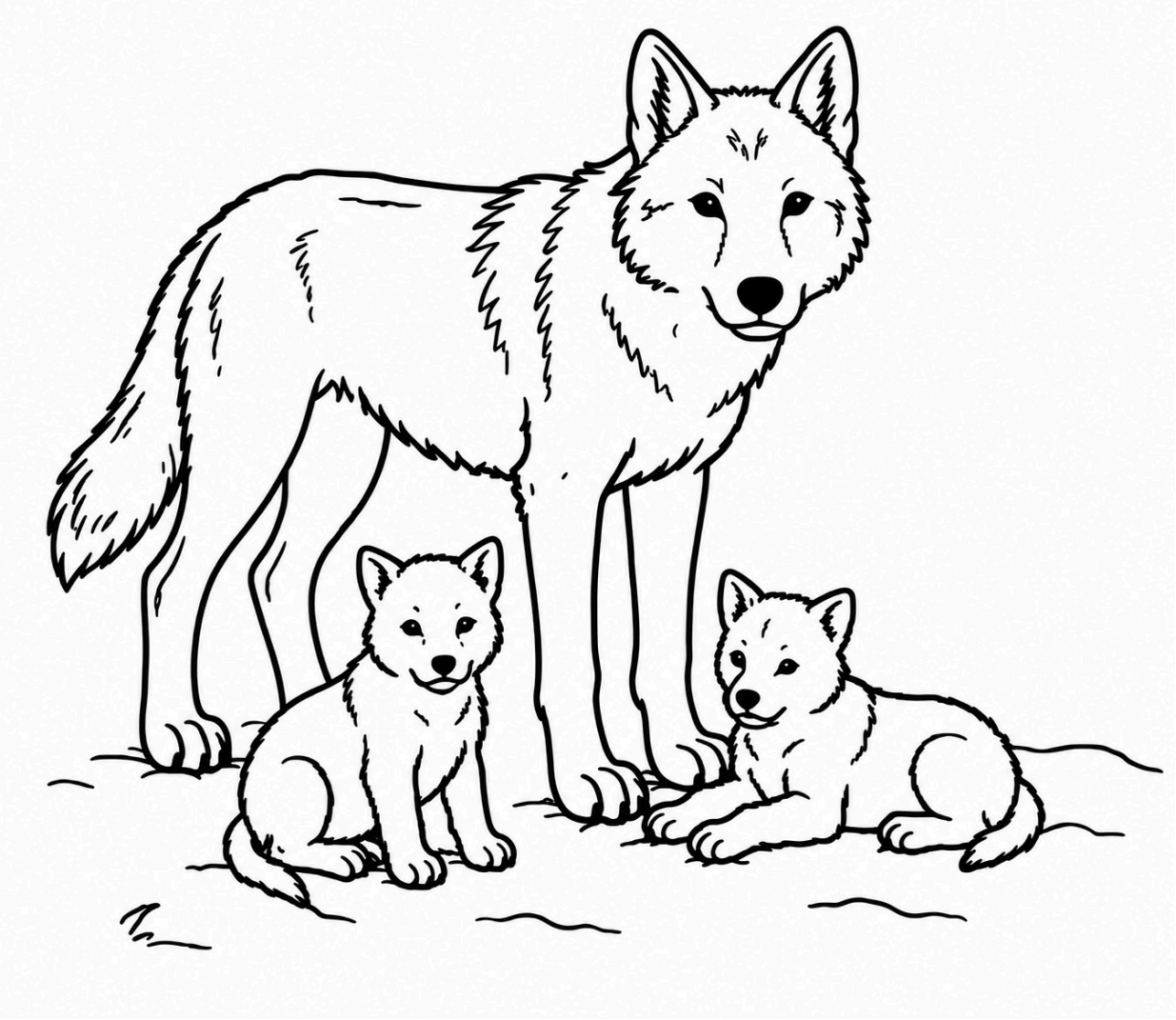
WOLVES MAY HAVE GAINED

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 tells you things with its whole body, not with one part at a time. One clue is not 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?

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 animals.

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 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.

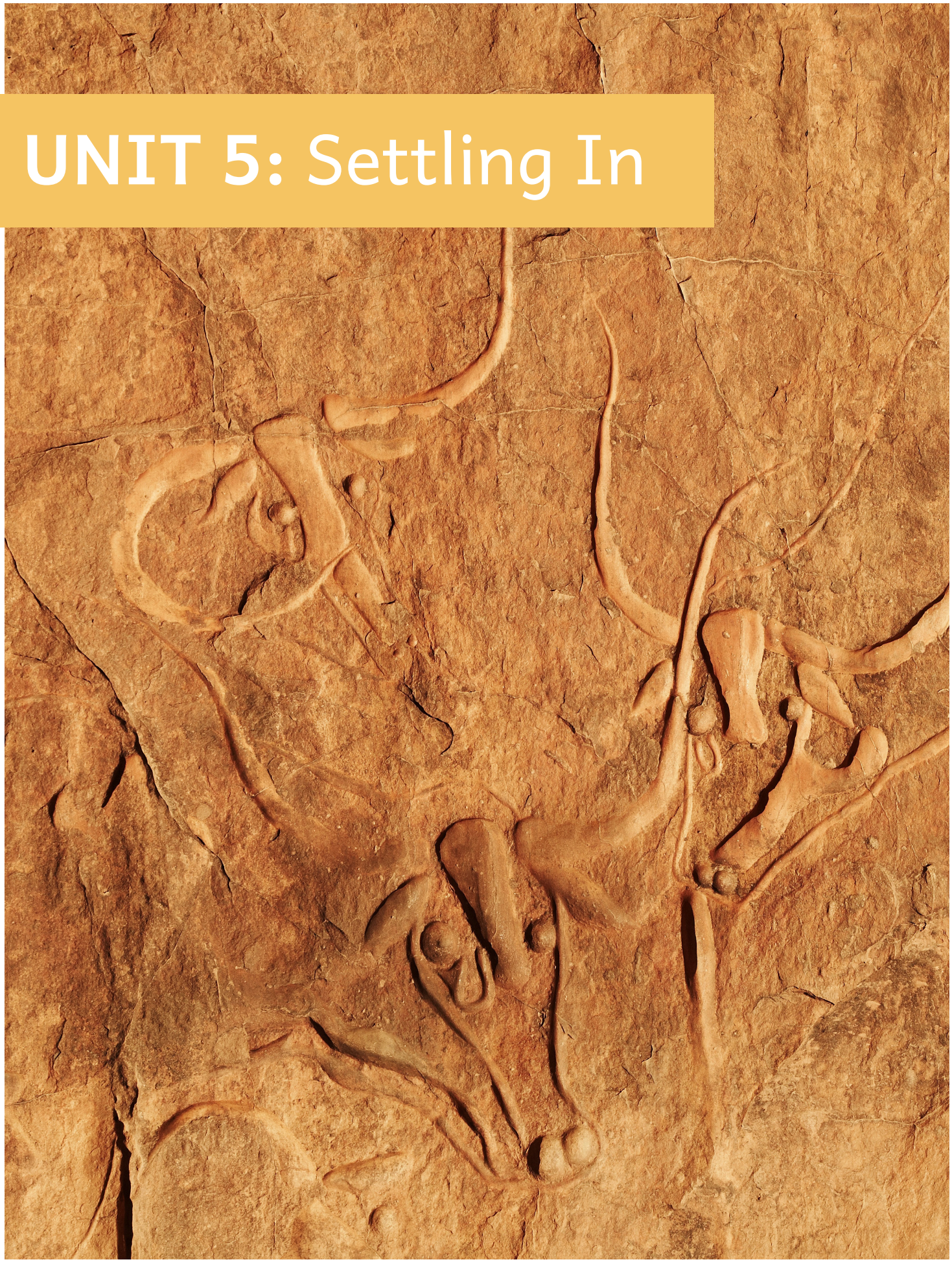
The girl watched Shadow. The elder watched Shadow.

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.*

UNIT 5: Settling In

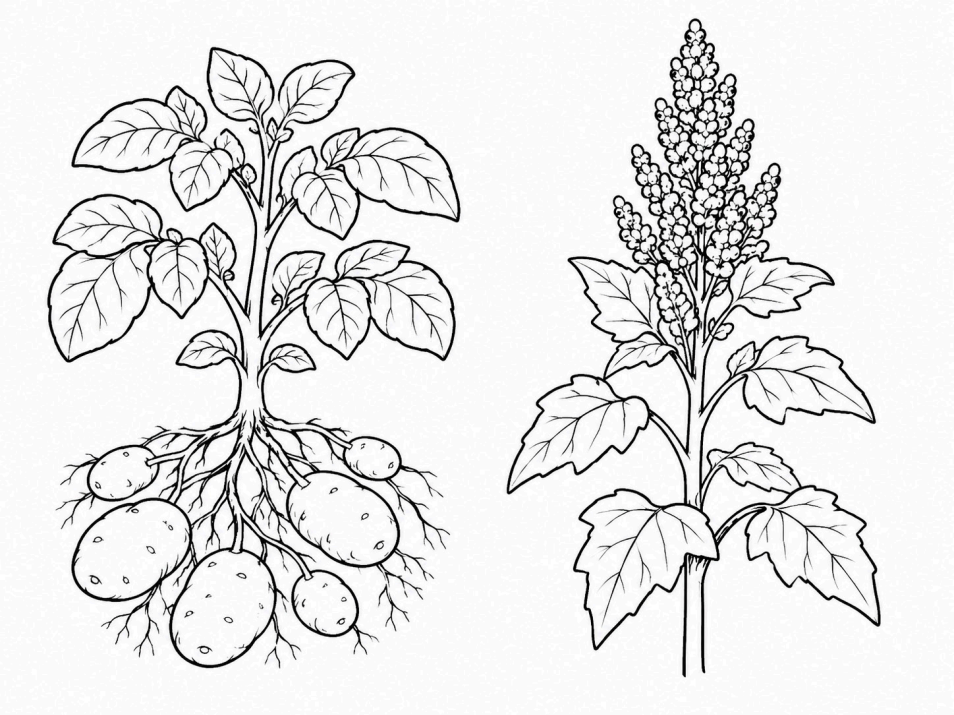


Lesson 32:
Farming at Altitude

In This Lesson

- ☐ Read Lesson 32 in the Text
- ☐ Time Travel Passport
- ☐ Potatoes and Quinoa in the Andes
- ☐ 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
- ☐ ½ teaspoon salt
- ☐ 1 tablespoon olive oil
- ☐ 1 cup corn, peas, diced cucumber, diced tomato, or chopped bell pepper
- ☐ ½ cup cooked black beans or lentils, optional
- ☐ 2 tablespoons lemon or lime juice
- ☐ 1 tablespoon chopped parsley or cilantro, optional
- ☐ ¼ 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 or similar, peeled and cut into chunks
- ☐ 2 tablespoons butter
- ☐ ½ cup milk, more as needed
- ☐ 1 ½ 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°F.
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 generations. 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 generations, 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 guanaco is a larger wild relative.

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.

- *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.*