Life at Mesa Verde: Using Natural Resources to Meet Fundamental Human Needs

A partnership among the History Colorado State Historical Fund, Mesa Verde National Park and Crow Canyon Archaeological Center, the Mesa Verde National Park Curriculum Project provides a wealth of resources, lesson plans, activities and itineraries for students, teachers and families exploring the park virtually or in person. The goal of this student-centered, standards-aligned curriculum is to enhance, enrich and support active learning about this remarkable national park.

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Grade 3-4 Unit Introduction

Life at Mesa Verde: Using Natural Resources to Meet Fundamental Human Needs

Unit Key Words and Topics: Humans and environment, natural resources, fundamental needs, map reading

Unit Essential Questions: How did Ancestral Pueblo people use natural resources in the Mesa Verde region to meet their fundamental needs? How does that compare to the way I use natural resources?

Unit Overview: During this unit, students will examine the relationships between the Ancestral Pueblo people and the environment at Mesa Verde National Park to better understand natural resource use and the fundamental needs of humans. Pre-visit lessons will define terms and build a foundation to contextualize students' experiences at the park. At the park, students will research how Ancestral Pueblo people utilized natural resources from the region to meet their fundamental human needs. Through post-visit lessons, students will synthesize and summarize their research, creating informational posters about the Ancestral Pueblo people's use of 37 natural resources at Mesa Verde National Park. Students will also compare their own natural resource use with that of the Ancestral Pueblo people using graphic organizers.

Lesson Overview

Pre-Visit Lessons:

- 1. "What Do We Need? An Introduction to Fundamental Human Needs." Students work in groups to identify fundamental human needs and related natural resources.
- 2. "Here We Go... A Park Preview." Students consult park maps, field trip itinerary, and view a short video about visiting Ancestral Pueblo sites to prepare for their trip.

Field Trip Lessons:

- 3. "Natural Resource Scavenger Hunt." Students explore the park in research teams, studying key regional natural resources and their uses.
- 4. "Field Trip Extensions." Activities for school groups with additional time and flexibility during their field trip.

Post-Visit Lessons:

- 5. "How We Do It: Fundamental Human Needs Poster." Students synthesize research to create informational posters.
- 6. "How Do We Compare?" Students create a graphic organizer to compare their own use of natural resources with that of the Ancestral Pueblo people.

Field Notebook:

Customizable writing and research prompts for students at all stages of the curriculum, including document-based questions (DBQs).

Mesa Verde National Park Curriculum Project Blended curriculum for grades 3–8 Grade 3-4 Background Information and Resources

Background Information and Resources

This curricular unit explores Ancestral Pueblo people's natural resource use in the Mesa Verde region as they worked to meet their fundamental human needs. Relationships between humans and the environment are key themes as students study natural resource use as well as human impacts on the environment. Throughout the unit, students will make comparisons between the ways they use natural resources to meet fundamental human needs today and the way Ancestral Pueblo people did centuries ago.

The Mesa Verde region occupies just under 10,000 square miles between the Colorado, Piedra and San Juan rivers. It is located in what is today known as southwestern Colorado, southeastern Utah and northwestern New Mexico, a physiographic region that is part of the vast Colorado Plateau. The region is a dynamic mix of sandstone canyons, sage-covered plains, pinyon juniper forests as well as Douglas-fir and Ponderosa pine forests. Winters are cold and snowy making way to hot, dry summers. The habitats in the region support diverse wildlife including resident and migratory mammals, birds, reptiles, amphibians, fishes and invertebrates.

Ancestral Pueblo people first settled in Mesa Verde around A.D. 550. Cultures and communities thrived for 700 years in the region until the thirteenth century. By A.D. 1300, most Ancestral Pueblo people migrated away from the region south to villages and communities in what is now northern and central Arizona and New Mexico. Twenty-six modern tribes including the Hopi, Zuni and Pueblos of Taos, Acoma, Jemez and others trace their ancestry to the Ancestral Pueblo peoples of the Mesa Verde region.

Native and non-native archaeologists and historians believe there were many factors contributing to the broad-scale migration of thousands of people away from the Mesa Verde region. These include drought, soil depletion, cold snaps, over-hunting, deforestation, as well as social and political conflict. Many of these factors are directly related to natural resource use.

Today the Mesa Verde region is home to diverse populations of Anglo, Hispanic, and Native (especially Navajo and Ute) people. The region is also home to thousands of Ancestral Pueblo sites—from pithouses, kivas and small room blocks to great houses, large pueblo communities, and the iconic cliff dwellings Mesa Verde National Park is known for. Archaeological research as well as oral history research in partnership with Pueblo people points to a thriving population with complex and sophisticated relationships with the land and environment. Beautiful artwork and artifacts including pottery, jewelry, tools and petroglyphs found in the area indicate a culture that developed intimate, intricate relationships with the land. In this unit, students explore dimensions of Ancestral Pueblo culture and natural resource use to reflect upon their own.

Grade 3-4 Background Information and Resources

Additional Resources

Mesa Verde National Park website: http://www.nps.gov/meve/index.htm

Within this site, the links to "History & Culture"

(http://www.nps.gov/meve/learn/historyculture/index.htm) and "People"

(http://www.nps.gov/meve/learn/historyculture/people.htm) are especially relevant for this grade 3-4 unit. Educational resources, especially the park's background information on Ancestral Pueblo chronology at Mesa Verde, are great classroom resources:

http://www.nps.gov/meve/learn/education/classrooms/upload/ep_activity3_chronology.pdf

Crow Canyon Archaeological Center's Educational Resources:

http://www.crowcanyon.org/index.php/classroom-resources

Crow Canyon Archaeological Center has some great classroom and online resources for students. "Pueblo Indian History for Kids" provides an interactive timeline of Pueblo history in the region including details about natural resource use and human fundamental needs. Lessons for using this timeline can be found on Crow Canyon's website.

Twenty-six Associated Tribes of Mesa Verde:

http://www.nps.gov/meve/learn/historyculture/upload/meve associated tribes.pdf

This document provides a list and map of the tribes that have special relationships with Mesa Verde National Park. It is a good starting point for students exploring the lives and cultures of modern Pueblo people.

Indian Pueblo Cultural Center website: http://www.indianpueblo.org/

This Albuquerque museum's website is another great place for students to explore the cultures of contemporary Pueblo people.

UNESCO's Mesa Verde website: http://whc.unesco.org/en/list/27

As a designated UNESCO World Heritage Site, this page highlights the global significance of the park.

Grade 3-4 Field Trip Itinerary

Field Trip Itineraries

For students who have never visited Mesa Verde National Park or studied Pueblo culture, there is a great deal to see, experience and learn as a park visitor. This unit challenges students to pay attention to the ways Ancestral Pueblo people used natural resources from the region to create a thriving culture. To support this work, it is important students explore an Ancestral Pueblo site as well as the Chapin Mesa Archeological Museum, which displays and explains many artifacts used by the Pueblo people—present and past. The sites themselves are void of most artifacts making it difficult for students to appreciate the complexities of the culture. The self-guided Spruce Tree House Trail, with its interpretive signs and the nearby Chapin Mesa Museum are essential stops for school groups working with this unit.

Though it helps to connect with the park's Education Coordinator prior to a visit, this curriculum does not necessitate scheduling guided park tours unless schools have the time and interest. The Spruce Tree House Trail always has an interpretive guide present to help answer questions and orient visitors to the region and the cliff dwelling. Interpretive staff or other park staff may be able to meet with students during their field trip. If you are interested in meeting with a park staff member, please contact the Education Coordinator in advance for scheduling.

The Spruce Tree House Trail and Chapin Mesa Archeological Museum provide the best windows into Ancestral Pueblo natural resource use for this unit. If schools have additional time at the park, the following sites (in order of relevance) could be included in itineraries.

Spruce Tree House Closure, 2016 Until further notice, the Spruce Tree House cliff dwelling is closed to visitors due to rock fall safety hazards. The Spruce Tree House trail is partially open and visitors can still get a clear view of the cliff dwelling. Groups working with this curriculum will find that the Chapin Mesa Museum, the open sections of the Spruce Tree House Trail, as well as many of the interpretive signs around the Chapin Mesa Historic District (outside of the Chapin Mesa Museum and the Chief Ranger's Office) will help students complete their natural resource scavenger hunt. Other viable options in the park are listed below. School group tours of Balcony House for 3rd–4th grade groups may be scheduled in advance of their field trip by contacting the park. Balcony House school group tours explore issues related to natural resources and life at Mesa Verde in the tour curriculum.

Spruce Tree House

- Location: Chapin Mesa Museum Loop
- Travel time from Visitor and Research Center: 45-minute drive
- Travel time from Chapin Mesa Museum: 15–20 minute walk each way
- Suggested time to spend there: 45 minutes plus additional 30 minutes for the roundtrip hike
- **Description:** Along the trail to this cliff dwelling are a number of interpretive signs that are directly aligned to this unit's 37 natural resources. Here students can see a seep spring, go inside a kiva, and use a mano and metate. In addition, park interpretive staff is always available here and students should feel free to ask questions.
- Amenities: Restrooms, picnic area nearby, shade, Chapin Mesa Museum, interpretive exhibits

Grade 3-4 Field Trip Itinerary

Chapin Mesa Archeological Museum

• Location: Chapin Mesa Museum Loop

• Travel time from Visitor and Research Center: 45-minute drive

• Travel time from Chapin Mesa Museum: n/a

• Suggested time to spend there: 60 minutes

• **Description:** This museum provides students with a visual timeline of the Ancestral Pueblo world through chronological dioramas. Artifacts found throughout the park are on display. Information on this unit's 37 natural resources can be found throughout the museum for careful explorers.

• Amenities: Exhibits and bookstore, nearby restrooms, café, nice spots to have lunch and discuss work.

Mesa Top Sites

• Location: Mesa Top Loop

• Travel time from Visitor and Research Center: 50-minute drive

• Travel time from Chapin Mesa Museum: 15-minute drive

• Suggested time to spend there: 1.5–2 hours depending on number of stops and driving time

• **Description:** This 6-mile driving tour provides a journey through 700 years of Ancestral Pueblo architecture. At each stop, students can view excavated dwellings. This loop includes five stops and three overlooks with parking for buses.

• Amenities: Ssee below

Stop/Overlook Name	Bus Parking on	Recommended Time	Amenities
Pithouse (A.D. 600)	Left	5 min	None
Navajo Canyon Overlook	Right	5 min	None
Square Tower Overlook	Right	10 min (some walking)	None
Pithouse and Pueblo (A.D. 700–950)	Right	10 min	None
Mesa Top Sites (A.D. 900–1100)	Right	10 min	Restrooms
Sun Point Pueblo (A.D. 1200)	Left	5 min	None
Sun Point Overlook	Right	10 min	None
Oak Tree House Overlook	None		
Fire Tower Overlook	None		
Sun Temple	Left	10 min	Restrooms, benches

Grade 3-4 Field Trip Itinerary

Visitor and Research Center

- Location: Off highway exit to the left, before entering park
- Travel time from Chapin Mesa Museum: 45-minute drive
- Suggested time to spend there: 30 minutes
- **Description:** The Visitor and Research Center provides a place for park orientation and a quick look into the Ancestral Pueblo world. From dioramas to digital collections, this center is a great introduction to the park's mission and Ancestral Pueblo culture.
- Amenities: Restrooms, picnic areas, water filling station, ticket sales for site tours, and gift shop

Balcony House Educational Tour (advance reservations required)

- Location: Balcony House parking lot
- Travel time from Visitor and Research Center: 45 minutes
- Travel time from Chapin Mesa Museum: 10-15 minutes
- Suggested time to spend there: The educational tour takes approximately 90 minutes
- **Description:** This pre-arranged tour of Balcony House (call the park Educational Coordinator to schedule in advance) focuses on the day-to-day lives of Ancestral Pueblo people
- Amenities: Restrooms, shaded benches

Grade 3-4 Standards Alignment

Next Generation Science Standards

Performance Expectations:

4-ESS2-2: Analyze and interpret data from maps to describe patterns of Earth's features.

4-ESS3-1: Obtain and combine information to describe that energy and fuels are derived from natural resources and their uses affect the environment.

Science and Engineering Practices:

Engaging in Argument from Evidence

- Construct an argument with evidence, data, and/or a model.
- Construct an argument with evidence.
- Make a claim about the merit of a solution to a problem by citing relevant evidence about how
 it meets the criteria and constraints of the problem.

Obtaining, Evaluating, and Communicating Information

Obtain and combine information from books and other reliable media to explain phenomena.

Disciplinary Core Ideas:

LS4.C: Adaptation: For any particular environment, some kinds of organisms survive well, some survive less well, and some cannot survive at all.

LS4.D: Biodiversity and Humans: Populations live in a variety of habitats, and change in those habitats affects the organisms living there.

ESS3.A: Natural Resources: Energy and fuels that humans use are derived from natural sources, and their use affects the environment in multiple ways. Some resources are renewable over time, and others are not.

ESS3.A: Natural Resources: Energy and fuels that humans use are derived from natural sources, and their use affects the environment in multiple ways. Some resources are renewable over time, and others are not.

Crosscutting Concepts:

Cause and Effect: Cause and effect relationships are routinely identified and used to explain change.

Common Core Academic Standards

Anchor Standards – Language Arts:

<u>CCSS.ELA-Literacy.CCRA.R.1</u>: Read closely to determine what the text says explicitly and to make logical inferences from it; cite specific textual evidence when writing or speaking to support conclusions drawn from the text.

<u>CCSS.ELA-Literacy.CCRA.R.10</u>: Read and comprehend complex literary and informational texts independently and proficiently.

<u>CCSS.ELA-Literacy.CCRA.W.1</u>: Write arguments to support claims in an analysis of substantive topics or texts using valid reasoning and relevant and sufficient evidence.

<u>CCSS.ELA-Literacy.CCRA.W.3</u>: Write narratives to develop real or imagined experiences or events using effective technique, well-chosen details and well-structured event sequences.

Grade 3-4 Standards Alignment

<u>CCSS.ELA-Literacy.CCRA.W.4</u>: Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.

<u>CCSS.ELA-Literacy.CCRA.W.9</u>: Draw evidence from literary or informational texts to support analysis, reflection, and research.

<u>CCSS.ELA-Literacy.CCRA.W.10</u>: Write routinely over extended time frames (time for research, reflection, and revision) and shorter time frames (a single sitting or a day or two) for a range of tasks, purposes, and audiences.

<u>CCSS.ELA-Literacy.CCRA.SL.2:</u> Integrate and evaluate information presented in diverse media and formats, including visually, quantitatively, and orally.

<u>CCSS.ELA-Literacy.CCRA.L.6</u>: Acquire and use accurately a range of general academic and domain-specific words and phrases sufficient for reading, writing, speaking, and listening at the college and career readiness level; demonstrate independence in gathering vocabulary knowledge when encountering an unknown term important to comprehension or expression.

College, Career, and Civic Life (C3) Framework for Social Studies State Standards

Dimension 1: Developing Questions and Planning Inquiries

<u>D1.1.3-5</u>: Explain why compelling questions are important to others.

<u>D1.5.3-5</u>: Determine the kinds of sources that will be helpful in answering compelling and supporting questions, taking into consideration the different opinions people have about how to answer the questions.

Dimension 2: Geographic Representations

<u>D2.Geo.2.3-5</u>: Use maps, satellite images, photographs and other representations to explain relationships between the locations of places and regions and their environmental characteristics.

<u>D2.Geo.3.3-5</u>: Use maps of different scales to describe the locations of cultural and environmental characteristics.

Dimension 2: Human-Environment Interactions

D2.Geo.4.3-5: Explain how culture influences the way people modify and adapt to their environments.

<u>D2.Geo.5.3-5</u>: Explain how the cultural and environmental characteristics of places change over time.

Dimension 2: Human Population: Spatial Patterns and Movements

<u>D2.Geo.8.3-5</u>: Explain how human settlements and movements relate to the locations and use of various natural resources.

Dimension 2: Change, Continuity and Context

D2.His.2.3-5: Compare life in specific historical time periods to life today.

Dimension 3: Gathering and Evaluating Sources

<u>D3.1.3-5</u>: Gather relevant information from multiple sources while using the origin, structure and context to guide the selection.

Dimension 3: Developing Claims and Using Evidence

<u>D3.3.3-5</u>: Identify evidence that draws information from multiple sources in response to compelling questions.

<u>D2.4.3-5</u>: Use evidence to develop claims in response to compelling questions.

Dimension 4: Communicating Conclusions

<u>D4.2.3-5</u>: Construct explanations using reasoning, correct sequence, examples and details with relevant information and data.

Grade 3-4 Pre-Visit Lessons

Lesson 1 – What Do We Need? An Introduction to Fundamental Human Needs

Lesson overview:

This lesson introduces students to the concepts of fundamental human needs and natural resources. Students work in teams to create a two-column poster that defines, provides examples and makes connections between both concepts. Students are also introduced to some of the common natural resources in the Mesa Verde region and make efforts to align these resources to the fundamental human needs they met.

Time required: 1-2 hours

Materials/resources:

- 1. Blank sheets of paper for brainstorming
- 2. Poster paper, markers, colored pencils
- 3. Student handout "What Do We Need? Natural Resources of the Mesa Verde Region"
- 4. Scissors

Learning objectives:

- Students will define and provide examples of fundamental human needs and natural resources.
- Students will make connections between fundamental human needs and the natural resources used to fulfill them.
- Students will learn the names of some of the common natural resources in the Mesa Verde region and begin to think about how natural resources might have been used by Ancestral Pueblo people.

Intro activities:

1. Field notebook "Pre-Visit" questions assigned as short writing prompts, homework or partner/small group discussions.

Directions:

- Assign students into pairs or teams of three to four. Distribute blank sheets of paper and ask students to brainstorm a list of things humans need to survive and to thrive. "Thrive" implies more than just getting by physically, it challenges students to include things humans need to sustain themselves as a community and a culture.
- 2. Ask students to **think-pair-share** a definition of "Fundamental Human Needs." Let students **share** responses then **write** this (or a definition used in your classroom curriculum) on the board:

Fundamental Human Needs: the elements required for survival and normal mental and physical health, such as food, water, shelter, protection from environmental threats, and love. They can be organized into:

A. Physical Needs

1. Housing/Shelter

2. Food/Water

3. Clothing

B. Spiritual Needs

1. Culture/Community

2. Art

3. Religion

Grade 3-4 Pre-Visit Lessons

- 3. **Distribute** poster paper and ask students to divide the sheet into two large columns. Have students **title** the left column "Fundamental Human Needs." Students should **copy** the Fundamental Human Needs definition and outline (from above example) with ample space between categories to add information. Next, students should **organize** all the needs and details from their brainstorm handout in the appropriate category.
- 4. Students should **title** the right column "Natural Resources." Then, ask students to **think-pair-share** a definition for "natural resources" and **brainstorm** a list of natural resource examples on the right-hand column.
 - Possible answers or brainstorm ideas include: water, plants/trees, animals, rocks/minerals, fresh air.
- 5. Let students **share** responses then **write** the following (or a common definition used in your classroom) on the board:

Natural Resources: Something, such as a forest, a mineral deposit, or fresh water, that is found in nature and is necessary or useful to humans.

- 6. Have students **copy** the definition on the right column and **add** to their list additional examples of natural resources.
- 7. Challenge students to find **connections** between the columns by **drawing a line** between the natural resource and the fundamental human need it meets. Students should **label** the lines with specifics of how the resource is used. For example:
 - A. Housing/Shelter connected to wood, stone, soil, fossil fuels (building, maintaining heat)
 - B. Food/Water connected to plants (farming), animals (hunting and domestication), rivers, rain, lakes, stone/clay (pottery or containers), fire (cooking)
 - C. Clothing connected to plants (farming), animals (leather)
 - D. Culture/Community connected to all natural resources! Depending on definition of culture, it is often shaped in close relationship to the environment and available natural resources.
 - E. Art connected to plants (dyes, painting), minerals/stone (clay, sculpture)
 - F. Religion connected to plants (ceremony, medicine), environment (stories, beliefs)
- 8. **Distribute** student handout, "What Do We Need? Natural Resources of the Mesa Verde Region." **Review** with students the geographic, environmental and ecological introduction to the Mesa Verde region.
- 9. **Support** students as they follow directions on the handout and attempt to place natural resource cards under the related fundamental human need card those resources are used to meet. It is okay if students do not know all the uses of the natural resources—that will be the central goal of their research at Mesa Verde National Park!
- 10. If students have circled any of the natural resources (meaning they know for certain its use) ask them to **share** those uses. At this time, only share or review answers that students are sure of. (The rest they will research during their field trip scavenger hunt.)

Grade 3-4 Pre-Visit Lessons

- 11. **Wrap up** the lesson by explaining to students that they will research the Mesa Verde natural resource examples during their field trip. Their job will be to learn more about how Ancestral Pueblo people used the natural resources at Mesa Verde to survive and thrive for over 700 years.
- 12. Follow-up questions for discussion, think-pair-share, or independent journaling:
 - A. What do you think was the most challenging fundamental need for Ancestral Pueblo people to meet? Why?
 - B. Would your family be able to survive and thrive in the Mesa Verde region during the same time the Ancestral Pueblo people were there? Why or why not?
 - C. What do you think is the most important natural resource for humans? Why?
 - D. How do different environments shape how people meet their fundamental human needs?

STUDENT HANDOUT What Do We Need? Natural Resources of the Mesa Verde Region

The Mesa Verde region is located in the Four Corners area of the Southwest. It is called the "Four Corners" because it is the only place in the United States where the corners of four states meet: Colorado, Utah, Arizona, and New Mexico. The Mesa Verde region is named after Mesa Verde, a large mesa that towers above the surrounding landscape. A large part of the mesa is included in Mesa Verde National Park, which is visited by hundreds of thousands of people every year.

The Mesa Verde region is located in a high desert. The elevation ranges from about 4,300 to 7,000 feet (1,300 to 2,100 meters) above sea level. The landscape includes high mesas, rolling plains, and deep sandstone canyons. Winters are cold and snowy, and summers are hot and dry. Droughts are common. Sagebrush, pinyon trees, juniper trees, yucca, and cacti are common native plants in the area. Wild animals include deer, elk, rabbit, coyote, mountain lion, and many different kinds of birds, snakes, and lizards.



Crow Canyon Archaeological Center, "Pueblo Indian History for Kids"

https://www.crowcanyon.org/EducationProducts/pueblo history kids/introduction.asp

Pueblo culture has flourished in the American Southwest for thousands of years. Today, Pueblo Indians live in villages and communities in New Mexico and Arizona and all over the world. Pueblo Tribes are sovereign, independent nations that have a special relationship with the U.S. government. The ancestors of the Pueblo people, sometimes called "Anasazi" or "Ancestral Pueblo people" lived in the Mesa Verde region from around A.D. 550–1300. Around the twelfth and thirteenth centuries, most Ancestral Pueblo people living in the Mesa Verde region migrated south to the areas where contemporary Pueblo communities thrive today.

Grade 3-4 Pre-Visit Lessons

Directions:

Below are cards listing human fundamental needs and natural resources that were available in the Mesa Verde region during the time the Ancestral Pueblo people lived there. Follow directions to show what you know about how Pueblo people used natural resources of the Mesa Verde region to meet their fundamental human needs—to survive and thrive.

- 1. Cut out the cards, separating the fundamental human needs from the natural resources.
- 2. **Spread** the fundamental human needs cards out on your desk or table.
- 3. Read each of the natural resource cards. If you know how each card was used by Ancestral Pueblo people to meet their fundamental human needs, circle the word on the card and place it underneath the appropriate human need on your desk. If you can make an educated guess about the use of the resource, place it underneath the fundamental human need you think it meets. If you don't know anything about the natural resource, set it aside in the "not sure yet" pile. Some of the cards are duplicates—this means they were used by Ancestral Pueblo people in multiple ways and may have been used to fulfill multiple fundamental human needs.

HINT: Natural resources are often used to make tools. For example, some plants are used for dyes and paints that decorate food containers. Some stones are used to make knives that prepare food. In both cases, the plant or stone would be categorized under the "food" fundamental need even though it wasn't eaten! The painted designs also may have cultural meaning and therefore could be categorized under "culture" as well. Both are correct!

Fundamental Human Need – Material Housing/Shelter	Fundamental Human Need – Material Food/Water
Fundamental Human Need – Material Clothing	Fundamental Human Need – Spiritual Culture/Community
Fundamental Human Need – Spiritual Art	Fundamental Human Need – Spiritual Religion

Domesticated beans	Domesticated corn	Domesticated dogs
Wild and domesticated turkeys	Wild birds: (grouse, pheasant)	Large wild mammals: (mule deer, elk, mountain sheep)
Small wild mammals: (prairie dogs, squirrels, woodrats, rabbits)	Clay	Willow (shrub/tree)
Sandstone	Soft rocks (jasper, jet, turquoise)	Hard rocks (chert, flint, obsidian, quartz)

Yucca (plant, fiber)	Cotton (plant, fiber)	Shells
Rabbitbrush (plant)	Utah juniper (tree)	Big sagebrush (plant)
Prickly pear (cactus)	Snowberry (shrub)	Mormon tea (plant)
Mountain lover (plant)	Pinyon pine (tree)	Mountain mahogany (shrub)
Utah serviceberry (shrub)	Rocky Mountain clematis (plant)	Wild rose (shrub)
Poison ivy (plant)	Gambel oak (shrub)	Skunkbush (shrub)
Douglas-fir (tree)	Oregon grape (shrub)	Seep springs
Soil	Ash (from fires)	Creeks and streams
Domesticated squash	Yucca plant	Wild and domesticated turkeys

Lesson 2 – Here We Go ... A Park Preview

Lesson overview:

This lesson serves as an orientation to the Mesa Verde National Park field trip and scaffolds the lessons that follow. Students preview their field trip itinerary and anticipate how they will meet their fundamental human needs at the park. Then, students watch a 10-minute video about visiting Ancestral Pueblo sites and reflect on the meaning and significance of sacred sites.

Time required: 1-2 hours

Materials/resources:

- Park maps (one/pair of students or small group):
 http://www.nps.gov/meve/planyourvisit/maps.htm (you can also request the park send these via mail prior to beginning this lesson, contact park staff in advance for details).
 https://www.nps.gov/meve/learn/education/index.htm
- 2. Park visitor guides (one/pair of students or small group): download the appropriate season for your field trip http://www.nps.gov/meve/planyourvisit/brochures.htm (you can also request the park send these via mail prior to beginning this lesson, contact park staff in advance for details).
- 3. Park itinerary: develop this with the help of this curriculum guide's recommended itineraries. Share the field trip schedule with students including where they will go in the park, when, and what they will do there (i.e., explore the museum and work on scavenger hunt, hike to dwelling and work on scavenger hunt, eat lunch).
- Visit with Respect video available online either from https://www.youtube.com/watch?v=zwDrLqThhYY or https://www.crowcanyon.org/EducationProducts/pueblo history kids/video visit with respect. asp
- 5. Student handout "Here We Go...A Park Preview," available below.

Learning objectives:

- Students will examine maps and visitor guides of Mesa Verde National Park, identifying the sites and places they will visit on their field trip to the park.
- Students will identify how their fundamental needs will be met during the field trip.
- Students will articulate what it means to visit Ancestral Pueblo sites "with respect" after watching a video describing Pueblo connections to sacred sites in the Mesa Verde region.

Intro activities:

- 1. Field notebook "Before watching *Visit with Respect*" questions assigned as short writing prompts, homework or partner/small group discussions.
- 2. Pre-visit Lesson 1 "What Do We Need? An Introduction to Fundamental Human Needs"

Directions:

1. **Distribute** park maps and visitor guides, allowing students a few moments to preview the materials. **Share** your Mesa Verde field trip logistics and itinerary by writing them on the board or distributing hard copies of the field trip itinerary.

Grade 3-4 Pre-Visit Lessons

- Ask students to circle or highlight the sites in the park you will visit and the roads you will take directly on the maps.
- 3. **Review** the six fundamental human needs we will be studying in this lesson:
 - 1. Housing/Shelter
 - 2. Food/Water
 - 3. Clothing
 - 4. Culture/Community
 - 5. Art
 - 6. Religion
- 4. With partners or small groups, ask students to **discuss**, **write** down, and **share** with the class **how** and **where** they will be meeting their own fundamental needs during the field trip. This is a good time to remind students of items they need to bring on the field trip (jackets, long pants, sunscreen, hats, lunch, water bottle, walking shoes, cameras, notebooks etc.). *Possible answers might include:*
 - 1. Housing/Shelter school bus/cars, park pavilions/museums
 - 2. Food/Water packed lunch, snacks, water bottles, picnic areas
 - 3. Clothing seasonally appropriate clothing (jackets, sunscreen, etc.)
 - 4. Culture/Community your class's norms and behavioral expectations, rules
 - 5. Art cameras, notebooks to sketch or draw in
 - 6. Religion not necessarily a need met in school but field trips, especially to places like Mesa Verde, can be inspiring to the human spirit and fun!
- 5. **Distribute** student handout "Here We Go ... A Park Preview" and review the introduction. Have students independently **complete questions** 1 through 3 on student handout before watching the video. Students should **discuss** answers with a partner and **report** their responses back to class.
- 6. Have students **preview** questions 4 through 8 before watching the video. **Show** the video and give students a few minutes to complete the questions.
- 7. Again, ask students to **share** their responses with a partner and **report** back to the class summarizing their responses.
- 8. **Wrap up** the lesson by ensuring students' questions about the field trip are answered and reviewing expected field trip behavior.

Grade 3-4 Pre-Visit Lessons

STUDENT HANDOUT Here We Go ... A Park Preview

Today, many southwestern Native American Tribes (including the Hopi, Zuni Pueblo, Acoma Pueblo, and Taos Pueblo, among many others) trace their ancestry to the Mesa Verde region. The Ancestral Pueblo people who lived at Mesa Verde left the area around A.D. 1300 and settled to the south, in what is now called New Mexico and Arizona. Though the Pueblo people no longer live in the Mesa Verde region, the history, sites, and artifacts in the region remain important to their modern-day cultures.

Visit with Respect is a 10-minute video produced by the Bureau of Land Management – Anasazi Heritage Center and Crow Canyon Archaeological Center in partnership with Hopi and Pueblo Tribes. In the video, Pueblo people share their feelings about Ancestral Pueblo sites and their expectations for visitor behavior.

Before watching the video answer the following questions:			
1.	Where is your family from? Where are your ancestors from? Have you ever visited those places?		
2.	Have you ever visited places that used to be lived in, but aren't any longer? Where? What was it like there?		
3.	What does it mean to "visit with respect?"		

Grade 3-4 Pre-Visit Lessons

After watching the video answer the following questions:

4.	What features of historical sites matter to Pueblo people?
5.	What sort of behaviors does Dawa Taylor ask of his son when he visits these sites?
6.	What do other speakers in the film, like Tessie Naranjo, Rose Simpson, and Ernest Vallo, ask of visitors to ancient sites in the Mesa Verde region?
6.	Describe the way Pueblo people feel about ancient sites in the Mesa Verde region.
7.	How should you "visit with respect?"
8.	What behaviors will demonstrate you are "visiting with respect" when you go on your field trip to Mesa Verde?

Lesson 3 – Natural Resource Scavenger Hunt

Lesson overview:

During the field trip to Mesa Verde National Park, students will conduct research about natural resources found in the park and utilized by Ancestral Pueblo people. Teams of students are assigned a set of natural resource cards they must complete throughout the day. Teachers can assign all the cards to all students or split the cards amongst the class allowing students to focus only on a few natural resources. The recommended itinerary for this curricular unit takes classes to Spruce Tree House Trail as well as the Chapin Mesa Museum. The natural resources suggested for this unit can be researched using informative signs along the Spruce Tree House Trail, in the museum displays, in other park interpretive material and by talking with park interpretive staff.

Time required: 3-4 hours

Materials/resources:

- 1. Natural resource cards: one card/resource. There are 37 recommended natural resources for students to research. Teachers should assign students to teams or pairs and challenge each team to complete six to eight natural resource cards depending on time and student skill set. It is important to assign ALL the natural resources within a class to ensure that research is completed on every resource. This will be essential for post-visit lessons.
- 2. Clipboards or notebooks and pencils for students to carry while hiking or exploring the museum.

Learning objectives:

- Students will explore areas of the park and conduct research on natural resources used by Ancestral Pueblo people.
- Students will identify how natural resources in the Mesa Verde region were used to meet fundamental human needs.

Intro activities:

1. Pre-visit lessons: "What Do We Need? An Introduction to Fundamental Human Needs," and "Here We Go ... A Park Preview."

Directions:

- Prepare natural resource cards. It is recommended that teachers make at least two cards per resource so that at least two groups of students are researching each resource. Because there are two cards/page, make 36 copies of the cards.
- 2. Some natural resources are more common and easier to find and research. To ensure every group has some level of success, the following are recommended sets of cards to assign to each group. Once student groups are divided and natural resources are assigned, have students **write** the name of each of their natural resources on a card.

Grade 3-4 Field Trip Lessons

Remember to try to duplicate sets so at least two student groups are researching the same sets of natural resources.

Set 1:

Domesticated corn

Wild birds: grouse, pheasant

Soft rocks (jasper, jet, turquoise)

Seep springs

Wild rose (shrub)

Gambel oak (shrub)

Snowberry (shrub)

Set 2:

Domesticated squash

Small wild mammals: prairie dogs, squirrels,

woodrats, rabbits

Clay

Creeks and streams

Pinyon pine (tree)

Poison ivy (plant)

Mountain lover (plant)

Set 3:

Domesticated beans

Yucca (plant and fiber)

Large wild mammals: mule deer, mountain sheep, elk

Sandstone

Ash (from fires)

Prickly pear (cactus)

Douglas-fir (tree)

Mountain mahogany (shrub)

Set 4:

Utah juniper (tree)

Wild and domesticated turkeys

Hard rocks (chert, flint, obsidian, quartz)

Shells

Rabbitbrush (plant)

Mormon tea (plant)

Utah serviceberry (shrub)

Set 5:

Big sagebrush (plant)

Domesticated dogs

Soil

Cotton (plant and fiber)

Willow (shrubs and trees)

Oregon grape (shrub)

Rocky Mountain clematis (plant)

Skunkbush (shrub)

3. As your class hikes the Spruce Tree House Trail and explores the Chapin Mesa Museum, **support** students as they search for and record information about their natural resources (see simplified "Teacher Key" for natural resource list below).

Grade 3-4 Post-Visit Lessons

Mesa Verde Natural Resources Teacher Key

- 1. Domesticated corn food (easily stored), corn husks used for toys, dolls, ceremonial uses, mats, tassels for clothing
- 2. Domesticated squash food, squash (gourds) for containers and scrapers
- 3. Domesticated beans food (easily stored)
- 4. Domesticated dogs protection, belts made from dog hair
- 5. Wild and domesticated turkeys food, bones for tools, feathers for clothes and ceremonial uses. Arrows (fletching), beads, jewelry, yarn.
- 6. Wild birds (grouse, pheasant) food, bones for tools, feathers for clothes and ceremonial uses
- 7. Large wild mammals (mule deer, bighorn sheep, elk) food, clothing, tools, hide covers and bags, bones for scrapers and awls, sinew to attach spear points, sewing, whistles
- 8. Small wild mammals (prairie dogs, squirrels, woodrats, rabbits) food, clothing, tools, bone needles, bone weaving tools
- 9. Clay pottery for food storage, ceremonial uses, water storage, plaster and daub, mortar, roofing
- 10. Willow (shrubs and trees) basket making, tool making, mats, sandals, weaving loom anchors
- 11. Sandstone building stone, bricks and slaps, manos, metates, axes
- 12. Soft rocks (jasper, jet, turquoise) decoration on clothing, jewelry, pendants, beads
- 13. Hard rocks (chert, basalt, obsidian, quartz) tool-making, projectile points, drills, knives, saws, scrapers, pendants
- 14. Yucca plant clothing, shoes, food (fruit, pods, flowers), ropes, mats, sandals, belts, tumplines, ropes, bags, baskets, hunting, snares, jar rests, cordage, weaving, paint brushes, pottery repairs, threads, medicine, shampoo
- 15. Cotton clothing, cord, twine, weaving, sewing thread
- 16. Shells decoration on clothing, ceremonial uses, jewelry, bracelets, pendants
- 17. Rabbitbrush (plant) roof thatching, bread, baskets, yellow dye, medicinal uses
- 18. Utah juniper (tree) berries eaten, medicinal uses, yellow dye; wood frequently used in construction; outer bark used for fuel, sandals, and cradleboard lining (like diapers); incense
- 19. Big sagebrush used in construction, medicinal tea, fuel, green dye
- 20. Prickly pear (cactus) pads, fruits, seeds used for food
- 21. Snowberry used as tea for digestion, medicinal uses for burns and rashes. Berries used as soap.
- 22. Mormon tea seeds are eaten whole or ground into meal, tea has medicinal uses, tan-colored dye
- 23. Mountain lover Medicinal uses, berries as food source
- 24. Pinyon pine pinyon nuts food source, wood for fuel. Tea is medicinal, pitch makes baskets watertight. Pitch can be used to fix pottery.
- 25. Mountain mahogany roofing, arrow shafts, digging sticks, punches, reddish-brown and purple dye, prayer sticks, medicine
- 26. Utah serviceberry food. Wood for ceremonial uses, arrow shafts and fuel. Handles, dyes, weaving and loom construction.
- 27. Rocky Mountain clematis medicinal uses
- 28. Wild rose fruit eaten, medicinal uses
- 29. Poison ivy used in identifying areas with water like seep springs, medicinal uses
- 30. Gambel oak used in construction, medicinal uses for cuts, digging sticks and weaponry, fuel for fire.
- 31. Skunkbush berries used as food. Leaves are medicinal. Stems used in basket making and for dye. Wood for fuel or carving.
- 32. Douglas-fir fuel, ceremonial uses, medicinal uses
- 33. Oregon grape edible fruit, dye and medicinal uses
- 34. Seep springs water source
- 35. Soil growing crops
- 36. Ash (from fires) food, construction
- 37. Creeks and streams water source

Natural Resource Scavenger Hunt Cards

Name of natural resource:		
Where is it found in the park?	What fundamental human needs did it provide?	
How was it used by Ancestral Pueblo people?	Other interesting observations:	
Sketch the resource or the way it was u	ised on the back of this card.	
Name of natural resource:		
Where is it found in the park?	What fundamental human needs did it provide?	
How was it used by Ancestral Pueblo people?	Other interesting observations:	
Sketch the resource or the way it was used on the back of this card.		

Grade 3-4 Post-Visit Lessons

Lesson 4 – Field Trip Extensions

Lesson overview:

If your class has additional time to spend at Mesa Verde, the following activities extend themes from this unit.

- 1. Pueblo journal entries: find a quiet, reflective spot for students to sit: alongside the Spruce Tree House trail, at a picnic area or at one of the park overlooks. Ask children to write a diary entry from a normal day they might have as a Pueblo child living at Spruce Tree House. Ask students to include information about how they met their fundamental human needs: what they ate, how they helped prepare/gather/hunt for food, how they spent time in their dwellings, what they wore, chores related to gathering wood for fires, water for cooking and drinking or community events and activities.
- 2. **Natural resources then and now:** have students examine the list of 37 natural resources available in the Mesa Verde region that were used by the Ancestral Pueblo people. Challenge students to identify those natural resources that are still used today with examples.
- 3. **It's all connected:** natural resources from the Mesa Verde region are all connected ecologically to the environment, landscape, and ecology of the forests, plains, mesa tops and canyons of the region. In small groups, challenge students to identify those connections. On a blank sheet of paper, have students write the names of the Mesa Verde natural resources in a circle around the edge of the paper. Add to the circle "humans" and "sun." Students should draw lines between the natural resources and make notes about how each is connected (e.g.: food webs large predators eat small mammals which eat seeds from the plants; sun helps plants do photosynthesis, creeks, streams, rain and seep springs provide water to plants, animals and humans; humans use the sun and water to grow crops; rocks help humans build tools to hunt animals and grow plants).
- 4. **Seasonality**: what season is it when you are visiting Mesa Verde? The seasons in the region created unique opportunities and challenges for the Ancestral Pueblo people trying to meet their fundamental human needs. Challenge students to brainstorm the opportunities and challenges Ancestral Pueblo people might encounter during each season. Potential responses might include:
 - A. Spring: Opportunities: new growth of wild plants for harvesting, availability of bird eggs, some animals coming out of hibernation, water from snow runoff available. Challenges: winter reserves dwindling, not enough plant growth.
 - B. Summer: Opportunities: plants and animals available for hunting/gathering, early season crops becoming available. Challenges: heat, fire, drought.
 - C. Fall: Opportunities: harvest season for crops, nuts and berries in season, animals still available. Challenges: increasing cold, fire.
 - D. Winter: Opportunities: time to do other things than work in fields (construct tools, make pottery, crafts, storytelling). Challenges: cold, many plants/animals not available.
- 5. **Field Notebook questions:** the grade 3-4 Field Notebook includes a few questions for students to reflect upon and write about during their field trip if time allows.

Lesson 5 – How We Do It: Fundamental Human Needs Posters

Lesson overview:

In this lesson, students will synthesize their research at Mesa Verde by creating a poster that details how Ancestral Pueblo people used the natural resources of the Mesa Verde region to meet their fundamental human needs.

Time required: 2-3 hours

Materials/resources:

- Completed natural resource cards students should work across research teams in order to
 understand the uses of all 37 natural resources (not just the group of six to eight they
 researched) and complete the assignment. Teachers can review each of the 37 resources as a
 whole class or allow students to communicate findings in a more dispersed and informal manner
 as they work on their posters.
- 2. Poster board or large sheets of paper for final posters.
- 3. Markers, colored pencils, paint etc., for poster decoration.
- 4. Student handout "How We Do It: Fundamental Human Needs Poster Assignment"
- 5. Online access if students weren't able to find uses for all plants, the online database of ethnographic plant use from Crow Canyon Archaeological Center is a detailed resource for research. Students can search their plants by "Common Name" and find explanations of how the plants were used by Native people.

http://www.crowcanyon.org/ResearchReports/Archaeobotanical/Plant_Uses/compendium_A.a sp

In addition, Google searches for images of plants or stone types can help students with visual representations.

Learning objectives:

- 1. Students will synthesize research from the field onto informational posters.
- 2. Students will identify how natural resources in the Mesa Verde region were used to meet fundamental human needs.

Intro activities:

- 1. Pre-visit lessons: "What Do We Need? An Introduction to Fundamental Human Needs" and "Here We Go... A Park Preview."
- 2. Field trip lessons: "Natural Resource Scavenger Hunt" and "Field Trip Extensions."

Directions:

- 1. **Review** student findings from field trip scavenger hunt cards.
- 2. **Distribute** student handout "How We Do It: Fundamental Human Needs Poster Assignment." Review assignment requirements with students. Check for understanding.

Grade 3-4 Post-Visit Lessons

- 3. **Support** students as they work in teams on their posters. Challenge groups who finish early to use the online database to conduct additional research on regional plant use:

 http://www.crowcanyon.org/ResearchReports/Archaeobotanical/Plant_Uses/compendium_A.a.go/
- 4. **Wrap up** the assignment by discussing some of the following questions:
 - a. Can you think of a natural resource we saw during our Mesa Verde field trip that was not used by Ancestral Pueblo people? Why or why not?

 Possible answers might include: Pueblo people made use of almost everything, they wasted very little. There were things they threw away or discarded archaeologists often study middens (trash piles) to learn about people of the past and there are middens studied at Mesa Verde. People discarded broken pottery or stone chips, useless bones, burnt corn cobs, etc.
 - b. Why do you think we have more information about the fundamental needs of food and shelter than religion or culture/community?

 Possible answers might include: religion and culture/community can be difficult to learn about through the archaeological record or what was left behind. If certain items (jewelry, prayer sticks, pots) were of religious importance, the Pueblo people may have taken them when they migrated south. Without the help of modern-day Pueblo people interpreting the past, non-Pueblo historians or archaeologists might not know the meaning or use of religious items and not be able to identify them as such. Also, if some of the religious items are still in use today, their meaning and significance may be kept private by Pueblo people.
 - c. Were there any uses of natural resources that surprised you? Explain. *Answers may vary.*
 - d. Are there any Ancestral Pueblo uses of natural resources that are shared by people living in the Mesa Verde region today? Explain.

 Possible answers might include: various types of wood for fuel, domesticated plants and animals for food, sandstone/adobe for shelter, water and streams for drinking and growing plants, wild animals are still hunted, pinyon seeds are still gathered, sage and other plants are still used medicinally, clay is still used to make pottery, turquoise and other rocks are still used to make jewelry, etc.

Grade 3-4 Post-Visit Lessons

STUDENT HANDOUT How We Do It: Fundamental Human Needs Poster Assignment

In this activity, you will synthesize research from your scavenger hunt and create a poster that explains how Ancestral Pueblo in the Mesa Verde region used natural resources to meet their fundamental human needs.

Directions:

1. **Gather information.** Make sure you have information about the uses of all 37 natural resources listed below. Take notes while your class reviews them, consult with other research teams or research the natural resources independently using online searches. The plant database on Crow Canyon Archaeological Center's website is helpful in finding detailed information about native plant use

http://www.crowcanyon.org/ResearchReports/Archaeobotanical/Plant Uses/compendium A.asp

- 2. **Organize information.** Sort the natural resources into the six fundamental human needs categories:
 - A. Housing/Shelter
 - B. Food/Water
 - C. Clothing
 - D. Culture/Community
 - E. Religion
 - F. Art
- 3. **Create a draft.** On a small sheet of paper, use pencil to sketch out the organization and arrangement of information and visuals on your poster.
- 4. **Create your poster.** Your finished poster should include the following:
 - A. Title
 - B. Research Team names
 - C. Fundamental Human Needs all six
 - D. Natural Resources all 37, including explanations of how the resource was used
 - E. Visuals include graphics (at least one, try for more!) for each of the fundamental human needs. These can be drawings, sketches, collages, or images from the web.
 - F. Additional information details, descriptions, or summaries of how natural resources were used

Common Natural Resources of the Mesa Verde Region

- 1. Domesticated corn
- 2. Domesticated squash
- 3. Domesticated beans
- 4. Domesticated dogs
- 5. Wild and domesticated turkeys
- 6. Wild birds: grouse, pheasant
- 7. Large wild mammals: mule deer, mountain sheep, elk
- 8. Small wild mammals: prairie dogs, squirrels, woodrats, rabbits
- 9. Clay
- 10. Willow (shrubs, trees)
- 11. Sandstone
- 12. Soft rocks (jasper, jet, turquoise)
- 13. Hard rocks (chert, flint, obsidian, quartz)
- 14. Yucca (plant)
- 15. Cotton (plant, fiber)
- 16. Shells
- 17. Rabbitbrush (plant)
- 18. Utah juniper (trees)
- 19. Big sagebrush (plants)

- 19. Prickly pear (cactus)
- 20. Snowberry (shrub)
- 21. Mormon tea (plant)
- 22. Mountain lover (plant)
- 23. Pinyon pine (tree)
- 24. Mountain mahogany (shrub)
- 25. Utah serviceberry (shrub)
- 26. Rocky Mountain clematis (plant)
- 27. Wild rose (shrub)
- 28. Poison ivy (plant)
- 29. Gambel oak (shrub)
- 30. Skunkbush (shrub)
- 31. Douglas-fir (tree)
- 32. Oregon grape (shrub)
- 33. Seep springs
- 34. Soil
- 35. Ash (from fires)
- 36. Creeks and streams

Grade 3-4 Post-Visit Lessons

Lesson 6 – How Do We Compare?

Lesson overview:

In this lesson, students compare their own use of natural resources with the Ancestral Pueblo people. Students organize their comparisons and answer follow-up questions.

Time required: 1-2 hours

Materials/resources:

- 1. Completed Natural Resource Scavenger Hunt cards or posters from Lesson 5 "How We Do It"
- 2. Student handout "How Do We Compare?"

Learning objectives:

- Students will examine how they use natural resources on a daily basis.
- Students will compare their own use of natural resources to those of the Ancestral Pueblo people in the Mesa Verde region.
- Students will reflect on natural resource use and environmental impacts.

Intro activities:

- 1. Pre-visit lessons: "What Do We Need? An Introduction to Fundamental Human Needs" and "Here We Go... A Park Preview"
- 2. Field trip lessons: "Natural Resource Scavenger Hunt" and "Field Trip Extensions"
- 3. Post-visit lesson 5: "How We Do It: Fundamental Human Needs Poster"
- 4. Field notebook "Post-visit questions" assigned as short writing prompts, homework or partner/small group discussions.

Directions:

- 1. **Distribute** student handout "How Do We Compare?" **Review** introduction with students.
- 2. **Ask** students to complete question 1 independently. Allow students a few moments to share responses with a partner and revise their list. Encourage students to share responses. *Possible answers include: I woke up in my home (housing/shelter). Got dressed (clothing). Ate breakfast (food/water). Came to school and visited with friends (culture/community).*
- 3. **Ask** students to complete question 2 independently. Allow students a few moments to share responses with a partner and revise their list. Encourage students to share responses. Challenge students to trace their needs (food, water, shelter, clothing, etc.) as detailed as possible to the real natural resource(s) that were involved in producing and distributing the products. Possible answers include: Home built of wood, trees, steel, concrete. Breakfast cereal grain from farms, eggs from commercial chicken factories, milk from commercial cow operations. Clothes cotton cloth imported from India, sewn in China (labels inside your clothing often say where it was made and manufactured), shipped by cargo ship powered by fossil fuels to U.S., etc.
- 4. **Preview** the next questions and tasks for students, **check** for understanding and **support** students as they finish the handout.
- 5. **Wrap up** the assignment by having a few students **share** their comparisons and discussing some of the follow-up questions at the end of the handout.

Grade 3-4 Post-Visit Lessons

STUDENT HANDOUT How Do We Compare?

Introduction: In the same way Ancestral Pueblo people used natural resources to meet their fundamental human needs, you use natural resources to meet your fundamental human needs. In this activity you will look more closely at your natural resource use and compare it to that of the Ancestral Pueblo people.

Question 1: Think about your school day. What are all the ways you have met your fundamental human needs today? List them below.	Question 2: How did you use natural resources to meet those fundamental human needs? To the right of each need that you met, describe the processes and natural resources used in order for you to meet those needs. Be as detailed as possible!

Grade 3-4 Post-Visit Lessons

Question 3: How does your use of natural resources compare with Ancestral Pueblo people? Make a list below of three typical foods you eat and a list of three typical foods an Ancestral Pueblo person might eat.

My three typical foods:	Ancestral Pueblo typical foods:
Now, describe the natural resources used to produce people.	e those foods for both you and Ancestral Pueblo
Natural resources and processes used to make my food:	Natural resources and processes used to make
my rood.	Ancestral Pueblo foods:
my rood.	

How are these foods, natural resources, and processes similar? How are they different? Explain.

Grade 3-4 Post-Visit Lessons

Question 4: Choose another fundamental human need that you have met today using natural resources: housing/shelter, clothing, culture/community. You can even choose a specific process or activity to compare: for example, the tools and machines you and your family need to make dinner as compared to those used by the Ancestral Pueblo people (a food/water need). Or, the tools and processes you use to create a painting as compared to the Ancestral Pueblo people (art need). Compare that process or need and the natural resources used to meet it.

Fundamental human need, process, or activity sele	cted for comparison:
My need, process, or activity (describe):	Ancestral Pueblo need, process, or activity (describe):
Natural resources and processes used to meet need, process, or activity:	Natural resources and processes used to meet Ancestral Pueblo need, process, or activity:

How are these foods, natural resources, and processes similar? How are they different? Explain.

Grade 3-4 Post-Visit Lessons

Follow-up questions:

1.	What information and knowledge did Ancestral Pueblo people need in order to use natural resources from the Mesa Verde region? Give an example.
2.	What information and knowledge do you need in order to use natural resources to meet your fundamental human needs? Give an example.
3.	You visited the Mesa Verde region. How is the landscape, environment, and availability of natural resources different from or similar to your own home landscape, environment and available natural resources?
4.	What are some of the ways Ancestral Pueblo people affected (or may have affected) their environment by using natural resources? Explain.
5.	You use natural resources from all over the world. How much did Ancestral Pueblo people use natural resources from outside their region? How does access to natural resources from around the world change the way you meet your fundamental human needs? How does it change the environment?

FIELD NOTEBOOK

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VIS	it Questions:
1.	What do you know about Mesa Verde National Park?
2.	What do you know about the landscape, environment or ecology of the Mesa Verde region? What is it like there?
3.	What do you know about how the Ancestral Pueblo people who lived at Mesa Verde survived? How were they able to live there successfully for over 700 years?
4.	Think about your day thus far. What are the things you have done today that have helped you survive? How have you met your fundamental human needs today?
5.	Fundamental human needs help humans survive (physical needs) and thrive (spiritual needs). Are there other needs or dimensions of your life that you think are fundamental to who you are as an individual? What are they? What are the experiences, relationships, beliefs, or things that are essential to <u>you</u> ? Explain.

Grade 3-4 Field Notebook

	Before	watching	Visit	with	Res	pect:
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1.	Why do you think Pueblo people today care about places like Mesa Verde National Park?
2.	What places in the world are important to you, your family, or your community? How do you want visitors to act in those places?
3.	Why would you, your family, your community, and Pueblo people think a place like Mesa Verde National Park would be important enough to preserve? What other places can you think of that are worthy of preservation?

Grade 3-4 Field Notebook

Field Trip Questions:

1.	Find a quiet place to sit outside. Where are you? What does it look like? What does it sound like? What does it feel like in this place? Write or sketch your response.
2.	Ancestral Pueblo people lived in this region for over 700 years. Imagine growing up as a child in the Mesa Verde region. What would be the best parts about living here? What would be most challenging?
3.	If you had to survive and thrive here with only the same natural resources available to you as the Ancestral Pueblo people had, could you do it? What would you need to know?

Grade 3-4 Field Notebook

Post-Visit Questions:

1.	What are chores like in your family? Do you have any? What are they? Why must they be done?
2.	What would chores be like in an Ancestral Pueblo family? What might they be for a child your age? Why must they be done?
3.	What do you think were the most important natural resources to the Ancestral Pueblo people? Why?
4.	What do you think are the most important natural resources to people today? Why?

DBQ 1:

How did Ancestral Pueblo people use natural resources to meet their fundamental human needs?

Describe one of the Ancestral Pueblo artifacts below found at Mesa Verde National Park.

Explain how the artifact demonstrates the ways Ancestral Pueblo people used natural resources from the region to meet their fundamental human needs.



Mug - http://www.nps.gov/meve/learn/education/artifactgallery mug.htm



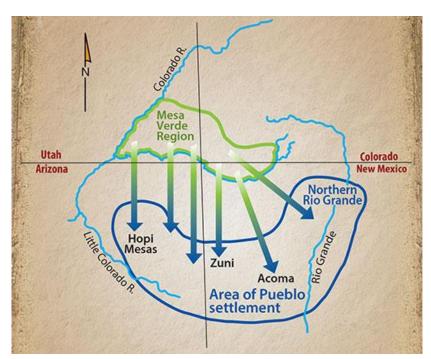
Stone spear and knife - http://www.nps.gov/meve/learn/education/artifactgallery_spearknife.htm

DBQ 2:

In the quote below, archaeologist Dr. Scott Ortman describes the migration of Pueblo people away from the Mesa Verde region in the thirteenth century. The map shows the direction of the migrations into the areas where many Pueblo people live today.

"Pueblo people faced many difficulties in the 13th century. They range from depletion of soils to over-hunting to droughts and perhaps cold snaps to social and political conflicts. We're not certain if any of these by themselves was sufficient to cause people to move away but it does appear that this combination of factors was one of the important drivers of the migrations."

-Dr. Scott Ortman, University of Colorado



Map courtesy of Crow Canyon Archaeological Center, http://www.crowcanyon.org/index.php/timelines/timeline-2

Based on Dr. Ortman's description and his summary of archaeological research, what role did natural resource use and human fundamental needs play in the Ancestral Pueblo migrations of the thirteenth century?