Can You Solve It? A Scavenger Hunt

Chapin Mesa Archeological Museum, Onsite-Visit

OBJECTIVES

Students will be able to:

- •Use information from a variety of sources to draw conclusions as they answer questions on their museum activity cards.
- •Identify at least two tools, three basic foods, two types of clothing, or two types of housing construction used by Ancestral Pueblo people.
- •Identify at least one cultural adaptation made in the development of Ancestral Pueblo people.
- •State at least one theory for the use of a kiva.

CO ACADEMIC STANDARDS

CO.6.SS.HIS.1 CO.5.RWC.WC.2 CO.8.SS.HIS.1 CO.3.RWC.WC.3 CO.HS.SS.HIS.1 CO.5.RWC.RR.3

CO.4.SS.GEO.2 CO.6.SS.GEO.2 CO.8.SS.GEO.2

MATERIALS

- •Each student (or team of students) needs a *Museum Activity Card Worksheet* consisting of four cards. If you want the students to have a single card, simply cut the cards from the worksheet.
- •Each student (or team of students) needs a pencil and clipboard.
- •Copy of the Location Key that contains exhibit information.

INTENDED GRADE/RANGE

•3rd Grade to High School

TIME INVOLVED

•30 to 60 minutes in Chapin Mesa Archeological Museum

LOCATION

•Chapin Mesa Archeological Museum (complements visit to Spruce Tree House)

OVERVIEW

"Can You Solve It?" is an ON-SITE activity designed to engage students in an active exploration of the many artifacts and exhibits at the Chapin Mesa Archeological Museum. It complements a self-guided visit to the cliff dwelling, Spruce Tree House, nearby. Thirty-two cards describe fictional scenarios that depict the life of Ancestral Pueblo people in A.D. 1200 to A.D 1275. Much like a scavenger hunt, students must locate objects, solve problems, and answer questions by examining exhibits, making observations, and recording what they find. Topics include daily activities of Ancestral Puebloan life, materials used to meet basic needs, and cultural adaptation.

"Can You Solve It?" is a fun and educational activity tailored to the varying needs and schedules of classes visiting the park. It works well on its own, or it can be done in conjunction with other stops in the park, such as Balcony House or Cliff Palace tours, a driving tour of the Mesa Top Loop, or a stop at the Far View Sites.

PREPARATION

- 1. Review both "Background Information for Teachers" and "Background Information for Students."
- 2. Review the Museum Activity Cards (pp. 6 13) ahead of time so you are familiar with the different subjects. Some have more advanced reading and writing levels. Museum Activity Cards #1 16 are considered beginning level cards, and #17 36 are advanced level cards.
- 3. Consider making a few extra copies of the cards for those teams that finish quickly, or for chaperones who are especially interested. You can also organize cards by degree of difficulty or by subject matter. Depending on the class schedule, the cards may be completed entirely at the park, or notes may be taken, and final drafts completed in the classroom.
- 4. There are four cards on a page. You will want to decide in advance if the class will be doing this activity as individuals or as teams. If they are working alone, you may want to cut the worksheet into the four separate cards. If they are working in teams, you may want to provide an entire four card worksheet.
- 5. Spruce Tree House is open self-guided from March to October. A park ranger is stationed in the site, but you may wish to purchase or borrow a trail guide for additional information. If you plan to visit between November and February, you will want to call ahead to ask if Spruce Tree House is available for your group.

Background Information For Teachers

Description

"Can You Solve It?" combines a scavenger hunt with in-depth examination of the displays. Finding answers requires different skills: reading the descriptive passages of an exhibit; observing an object closely to understand how it worked; gathering information from several sources; inferring a conclusion from evidence in a display. Many cards integrate students' knowledge about the lifeways of Ancestral Pueblo people with new ideas from the exhibits. The activity focuses the students' attention to the details of what is before them. "Can You Solve It?" directs students to consider both the functions of the artifacts and their artistry. Best of all, the activity engages students' imaginations.

- •The activity cards portray thirty-two fictional scenarios from the years A.D. 1200 to 1275.
- Each card presents a problem or describes an action from daily life. For example, there are cards about collecting firewood, hunting, collecting plants, coping with winter conditions, carrying an infant, and building a kiva.
- •The characters are male and female, of different ages, all facing diverse challenges.
- •Each card is keyed to at least one exhibit in Chapin Mesa Archeological Museum. It is recommended that teachers plan at least 30 to 60 minutes in the museum to explore the exhibits, view the dioramas, and complete the activity cards. (If you wish to view the museum's orientation film, add 25 minutes to your museum visit.)

Adapting the Activity to Fit Your Needs

The activity is designed to allow teachers to make decisions about how best to use their time when visiting the museum. For example:

- 1. You can complete the activity cards in the museum only, with a brief stop at the Spruce Tree House overlook.
- 2. You can include a visit to Spruce Tree House.
- 3. If you have a large group, it will be easier for the students to complete the activity if they are split into two smaller groups, with appropriate adult supervision for each. Half the group can visit the museum while the other visits Spruce Tree House. After about an hour, they can switch.
- 4. The cards can be adapted to different ages, reading, and writing abilities.
 - Using the Cards Beginning level students may work in teams with an adult chaperone to assist them in understanding the questions, and then helping them find and record answers. Advanced Level students can be required to complete one or more sets of cards, including written descriptions and sketches of the artifacts.
 - Adapting the Cards The cards themselves can be adapted. You can use advanced level cards for younger students by decreasing the number or types of questions. You can do the same with beginning level cards for very young students.

In most cases, answers will be found in a single exhibit, however, some, especially those for older students, require students to draw conclusions from multiple locations. When they find the answer to their question, students fill out their card, explaining how they would handle the situation(s). Being self-directed, students can find the answers to as many activity cards as they would like. The cards vary in complexity, so reviewing the cards in advance to decide which ones are most appropriate for your students is helpful.

Background Information for Students

Since their "discovery," the archeological sites at Mesa Verde have fascinated modern people. The Ancestral Pueblo people left no written record of their lives. Instead, the structures and objects they left behind must tell their story. As a result, buildings, tools, clothing, baskets, pottery, and adornments all have special meaning. A piece of pottery may have held water or stored seeds, but it was also shaped, fired, and painted by someone whose sense of beauty and sense of self are very much a part of it. The smooth polish and sharpened point of a digging stick resulted from someone taking a piece of wood and turning it into a tool for survival. The zigzag pattern on a basket, the bold designs painted on a bowl, the straight shaft of an arrow, even the thumbprints in the mortar between stones in a wall tell tales of a resourceful people adapting to a changing environment.

Artifacts from the Ancestral Pueblo people at Mesa Verde are on display in the Chapin Mesa Archeological Museum. Artifacts are objects that were made by humans, or adapted by them, to use in some way. Generally, artifacts are small enough for a person to carry. Structures like pueblos, pithouses, fire pits, and postholes, that can't be moved are called features. Artifacts can be made of stone, bone, clay, plants, or other material. Because they are old and can never be replaced, great care is taken to preserve them. Although you cannot hold the artifacts in the museum, you can look at them closely.

The "Can You Solve It?" activity will help you to learn about the people who made these artifacts and built Spruce Tree House and other cliff dwellings. You will be given activity cards that describe fictional stories about a person or situation from A.D. 1200 to 1275. This was the time when people were living and working at Spruce Tree House. The remains of that cliff dwelling are located in the canyon below the museum. Each card also has a problem to solve or a question to answer. Explore the exhibits in the museum until you find the one that has information about your subject. Be sure to examine the objects and materials closely. Pay attention to colors, patterns, textures, sizes, styles, and details. Read the text to find out about your topic. If needed, make notes or sketches on the back of your card to help you remember information. Then, on the front of the activity card, write the answer to your question or describe how you would solve the problem. Be sure to include your name and the name of the exhibit(s) where you found your information on the lines at the bottom of the card. When you are done, turn your card(s) in to your teacher. Have fun! There are some amazing artifacts to see, even one made of human hair!

PROCEDURE

Step-By-Step Guide

- 1. Decide ahead of time if you want students to work on this activity alone or in groups. Make sure that the chaperones are prepared.
- 2. Introduce the activity and answer questions before you enter the museum. There are sheltered areas along the side of the building where you can gather.
- 3. Hold up an activity card worksheet as you describe the activity. Explain that everyone (or every team) will receive an activity card or a worksheet of four cards to use while they are inside the museum. Each card contains a fictional story about an Ancestral Puebloan who lived in a cliff dwelling during the years A.D. 1200 to 1275. The cards describe a situation or problem that they faced. Imagining what it would be like to be that person, remind the students to explore the exhibits looking for information, tools, or materials in the displays to answer the question(s) on their cards. It may be helpful, especially for younger ages, to read aloud one of the cards as an example.
- 4. Review the instructions from "Background Information for Students," pointing out the features of the card(s). On the front is space where answers are to be recorded. Be sure to point out the two short lines at the bottom of the card where students write their name, and the name of the exhibit where they got their information. The latter is important for you to be able to know where the information and answer came from.
- 5. Tell the group that you (and/or a designated chaperone) will remain in a central spot in the museum (such as by the front door or information desk) so that they will be able to find you with completed cards or for assistance. It is also highly recommended to ask chaperones to help supervise. For instance, if students are working in teams, have a chaperone assigned to each team, or if students are working individually, ask chaperones to roam through the museum to help students with the activity.
- 6. Pass out an activity card to each student, or give each team of students a worksheet of four cards to complete. Hand out pencils and clipboards too. Instruct the group to WALK slowly and QUIETLY into the museum. Remember, out of courtesy to other park visitors please be quiet and respectful!
- 7. Do not hesitate to contact the park ranger at the information desk if you have questions or need directions. An answer sheet accompanies this activity to help you locate exhibits for the correct answers.

Extensions

Back in class, review what was found. Students can make short presentations about one of their "Can You Solve It?" activity cards describing specific foods, tools, clothing, and construction features and techniques of the Ancestral Pueblo people.

ASSESSMENT

Assess student achievement of stated objectives by classroom discussion of Ancestral Puebloan life and culture. Ask students to imagine themselves living during that time period at Mesa Verde. Discuss the hardships and ways of adapting to the challenges faced by the people then, and the ways that they succeeded.

COLORADO ACADEMIC STANDARDS

These are some of the standards that are covered with this activity. You may find additional standards relevant to your grade level and objectives.

CO.6.SS.HIS.1	Analyze and interpret historical sources to ask and research historical questions.
CO.8.SS.HIS.1	Formulate appropriate hypotheses about US history based on a variety of historical sources and perspectives.
CO.HS.SS.HIS.1	The historical method of inquiry to ask questions, evaluate primary and secondary sources critically analyze and interpret data, and develop interpretations defended by evidence from a variety of primary and secondary sources.
CO.4.SS.GEO.2	Connections within and across human and physical systems are developed.
CO.6.SS.GEO.2	Human and physical systems vary and interact.
CO.8.SS.GEO.2	Conflict and cooperation occur over space and resources.
CO.5.RWC.WC.2	The recursive writing process creates stronger informational and persuasive texts for a variety of audiences and purposes.
CO.3.RWC.WC.3	Correct grammar, capitalization, punctuation, and spelling are used when writing.
CO.5.RWC.RR.3	Quality reasoning requires asking questions and analyzing and evaluating view points.
•Cards #1 - 16	IVITY CARD WORKSHEETSpp 6-13 are beginning level cards 2 are advanced level cards.

EXHIBIT LOCATION KEY.....pp 14-15

MUSEUM ACTIVITY CARD #1	MUSEUM ACTIVITY CARD #2
You are an excellent hunter living at Spruce Tree House in AD 1200. You have just killed a mountain (big horn) sheep for your village. What weapon do you use for hunting? Describe it in detail or draw a picture of it. What materials did you use to make it?	You are a weaver in the village. You make beautiful belts and sashes used as clothing. Name three different materials that you like to weave with.
Your Name	Your Name
Exhibit Name	Exhibit Name
MUSEUM ACTIVITY CARD #3	MUSEUM ACTIVITY CARD #4
MUSEUM ACTIVITY CARD #3 It is mid-summer, the yucca plants have bloomed, and their fruit is ripening. As you collect the fruit, you think about what an amazing plant yucca is and name five things you use it for in your daily life. What are they? Can you name one thing that you do not want to do with it? Draw a picture of a yucca plant.	MUSEUM ACTIVITY CARD #4 You are making a new kiva for Spruce Tree House. Draw a picture of what the kiva will look like when you are finished. Name all the parts of it.
It is mid-summer, the yucca plants have bloomed, and their fruit is ripening. As you collect the fruit, you think about what an amazing plant yucca is and name five things you use it for in your daily life. What are they? Can you name one thing that you do not want to do with it? Draw a	You are making a new kiva for Spruce Tree House. Draw a picture of what the kiva will look like when you are

MUSEUM ACTIVITY CARD #5	MUSEUM ACTIVITY CARD #6
Throughout your village, you are known as a weaver of strong and beautiful baskets and mats. What material do you use to make your mats? What would a mat be used for? What would you use a basket for?	Your morning chore is to walk to the nearest spring to get water for your family. What do you use to carry the water back to your home? What is it called?
Your Name	Your Name
Exhibit Name	Exhibit Name
MUSEUM ACTIVITY CARD #7	MUSEUM ACTIVITY CARD #8
MUSEUM ACTIVITY CARD #7 You are a very young child. Describe three activities that you would do for fun in the courtyards at Spruce Tree House. If you have a pet, what would it be?	MUSEUM ACTIVITY CARD #8 Since winter is coming, you are weaving warm clothing for your family. What do you make for them to wear on their legs and feet to keep warm? What materials would you use to make them?
You are a very young child. Describe three activities that you would do for fun in the courtyards at Spruce Tree	Since winter is coming, you are weaving warm clothing for your family. What do you make for them to wear on their legs and feet to keep warm? What materials would you use

MUSEUM ACTIVITY CARD #9	MUSEUM ACTIVITY CARD #10
You are a farmer with crops growing on the mesa top above Spruce Tree House. Name the tool that you use for tasks such as loosening soil to plant seeds, or digging up weeds. Either draw a picture of this tool, or describe it in words. What does it look like? What material is it made from? Could it have other uses?	Your biggest pottery bowl has a crack in it. You will have to replace it soon. Living in A.D. 1200, what kind of designs or patterns do you put on your bowls? Draw a picture of one.
Your Name	Your Name
Exhibit Name	Exhibit Name
MUSEUM ACTIVITY CARD #11	MUSEUM ACTIVITY CARD #12
MUSEUM ACTIVITY CARD #11 You are a young boy living at Spruce Tree House. One day you go to a secret location you have found. You catch a small animal with a tool that your grandfather made for you. What is the tool? (Bonus: What is the special catch you could bring home that your family calls a "delicacy?")	MUSEUM ACTIVITY CARD #12 Your specialty at Spruce Tree House is making arrow points. What materials do you use to make them? What could I trade for them? Draw a picture of one of your favorite arrow points.
You are a young boy living at Spruce Tree House. One day you go to a secret location you have found. You catch a small animal with a tool that your grandfather made for you. What is the tool? (<i>Bonus:</i> What is the special catch you	Your specialty at Spruce Tree House is making arrow points. What materials do you use to make them? What could I trade for them? Draw a picture of one of your

MUSEUM ACTIVITY CARD #13	MUSEUM ACTIVITY CARD #14
It is a cold winter morning at Spruce Tree House. Last night it rained heavily and the fire in your dwelling has gone out. What tools do you use to get a fire going? What are they made out of? Describe (or draw) how you would use the tools to start a fire.	You are watching your parents working in one of the courtyards at Spruce Tree House. What types of clothing is your father wearing? What materials are they made out of? What kind of clothes does your mother wear, and what are they made out of?
Your Name	Your Name
Exhibit Name	Exhibit Name
MUSEUM ACTIVITY CARD #15	MUSEUM ACTIVITY CARD #16
MUSEUM ACTIVITY CARD #15 You are planning to make a new rock art panel on a cliff for a seasonal ceremony. Name two tools that you would use for a pictograph and two tools you would use for a petroglyph. Sketch two different designs that you are planning to create.	MUSEUM ACTIVITY CARD #16 Winter is coming, and with it snow and ice. You need to gather wood and water for your family. What do you wear on your feet in on the chilly hikes up and down the canyon? Describe them in detail, or draw a picture of them. What material(s) do you use to make them? Where do you find this material?
You are planning to make a new rock art panel on a cliff for a seasonal ceremony. Name two tools that you would use for a pictograph and two tools you would use for a petroglyph. Sketch two different designs that you are	Winter is coming, and with it snow and ice. You need to gather wood and water for your family. What do you wear on your feet in on the chilly hikes up and down the canyon? Describe them in detail, or draw a picture of them. What material(s) do you use to make them? Where do you

MUSEUM ACTIVITY CARD #17	MUSEUM ACTIVITY CARD #18
You are known as a great cook in the Spruce Tree House community. To serve soups and stews, you use a special utensil (tool) fashioned from a plant. What is the tool and the plant it is made from? As time goes on, you figure out how to make this utensil from clay. Draw a picture of this clay tool that you use for serving.	You make jewelry for your village. What type of materials do you use? Are they all found locally? If they are not found locally how do you get them?
Your Name	Your Name
Exhibit Name	Exhibit Name
MUSEUM ACTIVITY CARD #19	MUSEUM ACTIVITY CARD #20
You are a young boy at Spruce Tree House. One of your chores is to hunt for food for your family. Since you are too young to use a bow and arrow, you use another tool for catching small game. What is it? What is it is made out of, and how does it work? Draw a picture of it.	You are a young girl at Spruce Tree House. Your family grows crops on the mesa top. You love animals and want to help your family. What animal would you raise for the family? What else does this type of animal provide your family with besides food?
Your Name	Your Name

MUSEUM ACTIVITY CARD #21	MUSEUM ACTIVITY CARD #22
There are several types of trees that grow in Mesa Verde. Which trees would you use for building your home or a new kiva? What trees produce food? Are there other trees that can be used for different purposes?	You are a man who is recognized for you skill as a weaver. In the winter you spend long hours in the kiva at your loom weaving rolls of cotton cloth. What would your loom be made out of? Where you get the materials for it? Name and describe another tool that you would use in your weaving.
Your Name	Your Name
Exhibit Name	Exhibit Name
MUSEUM ACTIVITY CARD #23	MUSEUM ACTIVITY CARD #24
MUSEUM ACTIVITY CARD #23 You are a hunter who has just killed a large deer. How are you going to carry it back to your family? What tools did you bring with you to make this easier? What do you use to cut the animal up?	MUSEUM ACTIVITY CARD #24 You have chosen to draw a pictograph. What colors do you have to choose from? What materials do you use to make the colors? How do you get the paint onto the rock? Design a pictograph.
You are a hunter who has just killed a large deer. How are you going to carry it back to your family? What tools did you bring with you to make this easier? What do you use to	You have chosen to draw a pictograph. What colors do you have to choose from? What materials do you use to make the colors? How do you get the paint onto the rock?

MUSEUM ACTIVITY CARD #25	MUSEUM ACTIVITY CARD #26
You are preparing for a hunt with the other men in Spruce Tree House. To get ready, you make a new arrow point. What is your main tool for chipping? Name three steps in making an arrowhead.	You are a potter. What materials (temper) would you mix into the clay to keep it from cracking? Describe the steps in making a corrugated pot. What specific purpose was corrugated pottery used for?
Your Name	Your Name
Exhibit Name	Exhibit Name
MUSEUM ACTIVITY CARD #27	MUSEUM ACTIVITY CARD #28
MUSEUM ACTIVITY CARD #27 Your older sister is going to be married. You add on to your dwelling, as she and her new husband will be living with your family. To make it a special place for her, you decorate the inside. What do you do to the walls? How do you make this material? Describe or draw a design you might put on the walls.	MUSEUM ACTIVITY CARD #28 You are a woman living at Spruce Tree House. It is nearly time to harvest the corn. How do you prepare it for meals? How do you preserve it so it doesn't spoil?
Your older sister is going to be married. You add on to your dwelling, as she and her new husband will be living with your family. To make it a special place for her, you decorate the inside. What do you do to the walls? How do you make this material? Describe or draw a design you might put on	You are a woman living at Spruce Tree House. It is nearly time to harvest the corn. How do you prepare it for meals?
Your older sister is going to be married. You add on to your dwelling, as she and her new husband will be living with your family. To make it a special place for her, you decorate the inside. What do you do to the walls? How do you make this material? Describe or draw a design you might put on	You are a woman living at Spruce Tree House. It is nearly time to harvest the corn. How do you prepare it for meals?

MUSEUM ACTIVITY CARD #29	MUSEUM ACTIVITY CARD #30
You are a woman at Spruce Tree House with a family to feed. List five foods that you cook regularly. Describe two ways that you cook the food. What is one of your main every day food preparation activities, and what are the tools that you use for it?	As you build a kiva for your community, your grandfather tells you the oral history (story) about how kivas developed over time. What did you learn from your grandfather? What will you use your kiva for when it is finished?
Your Name	Your Name
Exhibit Name	Exhibit Name
MUSEUM ACTIVITY CARD #31	MUSEUM ACTIVITY CARD #32
MUSEUM ACTIVITY CARD #31 You are a weaver who makes blankets. What are two different materials that you use to make blankets, and how do you get them? What plant and other materials do you use? Describe or draw a method of weaving that you use.	MUSEUM ACTIVITY CARD #32 Your grandfather was known for making atlatls. You are known for making arrow heads. Why are bow and arrows better weapons than atlatls?
You are a weaver who makes blankets. What are two different materials that you use to make blankets, and how do you get them? What plant and other materials do you	Your grandfather was known for making atlatls. You are known for making arrow heads. Why are bow and arrows

LOCATION KEY MUSEUM ACTIVITY CARDS

19.

Room 3 – Wild Plant and Animal Foods

Room 5 – The Value of Yucca

1.	Room 3 – Wild Plant and Animal Food
2.	Room 3 – Clothing
3.	Room 5 – The Value of Yucca
4.	Room 2 – The Development of Pueblo Architecture (<i>Hint:</i> look at steps 5 & 6 for building a kiva)
5.	Room 3 – Basketry and Matting
6.	Room 3 – Black and White Pottery Masterpieces
7.	Dioramas
8.	Room 3 – Clothing
9.	Room 1 – People of Corn
10.	Room 3 – Pottery Shapes and Uses (or other exhibits with black and white pottery)
11.	Room 3 – Wild Plant and Animal Foods
	OR Room 1 – Basketmaker Period 1 AD to 450
12.	Room 3 – Wild Plant and Animal Foods
13.	Room 3 – Tools and Cordage
14.	Room 3 – Clothing
15.	Room 3 – Rock Art
16.	Room 3 – Clothing
17.	Room 2 – Development Pueblo Pottery
	OR Room 3 – Pottery Shapes and Uses
18.	Room 3 – Jewelry

LOCATION KEY MUSEUM ACTIVITY CARDS (CON'T)

20. Room 3 – Jewelry AND Clothing (or other exhibits that talk about turkeys)
 21. Room 4 – Common Trees of the Mesa Verde

(or other exhibits that talk about uses of trees)

- 22. Room 2 Importance of Cotton
- Room 3 Tools and Cordage
 OR

 Room 1 Basketmaker AD 1 to 450 AND Weaving
- 24. Room 3 Rock Art
- 25. Room 3 Wild Plant and Animal Food
- 26. Room 3 Corrugated Pottery
- 27. Room 3 House Construction
 OR
 Room 3 Rock Art
- 28. Room 3 Cultivated Food Food Preparation
- 29. Room 3 Cultivated Food Food Preparation
- 30. Room 2 Development of Pueblo Architecture
- 31. Room 1 Basketmaker Weaving $\frac{OR}{}$ Room 2 Importance of Cotton $\frac{OR}{}$ Room 3 Clothing
- 32. Room 1 Modified Basketmaker AD 450 to 750