



PETRA

LOST CITY OF STONE

An Educator's Guide

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FOR FURTHER INFORMATION and
ACTIVITIES, VISIT OUR WEB SITE AT
[WWW.AMNH.ORG/EDUCATION/RESOURCES/
EXHIBITIONS/PETRA](http://WWW.AMNH.ORG/EDUCATION/RESOURCES/EXHIBITIONS/PETRA)

KEY CONCEPTS and background

come prepared!

The Exhibition

Petra: Lost City of Stone explores the caravan city of Petra and the nomadic desert traders, the Nabataeans, who built it creating a crossroads of the ancient world. Its monuments were indeed "lost" to Westerners for over 500 years, until Swiss explorer Johann Ludwig Burckhardt arrived in 1812. But in fact the site has been continuously inhabited, first by the Nabataeans beginning in the third century B.C., and ultimately by nomadic Bedouin who lived in Petra's caves in modern times. The Nabataeans turned a remote and arid valley into a fertile oasis, a center of world trade, and a vibrant city. Caravan routes from Arabia, Asia, and as far as India, passed through, creating an extraordinary mixture of people and beliefs that thrived, together in peace, for a thousand years.

A Window on Our Own Culture

Ancient cultures have much to show us about patterns of historical change and continuity. Many parallels can be drawn between the commercial achievements of the ancient Nabataeans and today's trade and communication networks. Ancient Petra integrated ideas from many diverse cultures into a vibrant society, much like the United States has done throughout its history. Examining other cultures yields insights into which behaviors and beliefs are shared and which are unique to a particular time or people. This can help foster respect and appreciation for other cultures throughout the world. This guide encourages students to consider their own world-views and experiences as they explore Nabataean culture through the artifacts, paintings, photos, text, and multimedia presentations on display.

An Advance Look at the Exhibition

To help you prepare students before your visit and to follow up afterwards, text, graphics, and images from the exhibition text are available online at www.amnh.org/exhibitions/petra. It may be helpful to review the questions in the "Teaching in the Exhibition" section.

Teaching in the Museum

The Museum offers many opportunities for self-directed learning, so give students time to explore the exhibition on their own. You can customize and adapt the questions and activities in this guide for your class level and curriculum.

BACKGROUND

This first comprehensive exhibition about Petra brings the study of an ancient culture to life. It's the product of a unique collaboration between the Hashemite Kingdom of Jordan, the Cincinnati Art Museum, and the American Museum of Natural History. The exhibition brings together some 200 works of art—sculptures, ceramics, metalwork, stucco work, paintings, and drawings—most of which have never been seen in North America. They show why Petra is a UNESCO World Heritage Site, and illuminate the cultural diversity, both ancient and modern, of the Near East.

KEY CONCEPTS

The following key concepts correlate directly to the themes presented in "Teaching in the Exhibition."

Archaeology is a way to learn about ancient civilizations.

Archaeologists reconstruct and interpret the past. They excavate and analyze material remains in order to understand how people lived in the past, as well as broader issues like how societies and cultures change over time. In the process, they draw on information from other fields, such as chemistry, ecology, architecture, and linguistics. Little by little, collaborative research is bringing more of the story of the Nabataeans to light. Yet less than five percent of the site has been excavated, and our picture of urban life remains incomplete. We know what language they wrote, for example, but what did the Nabataeans speak? What was daily life like for an ordinary family? (Most archaeological finds, like jewelry and stone buildings, are artifacts of the elite; reconstructing the lives of the common people is more difficult.) As new information emerges, interpretations are revised, different questions asked, and new theories advanced. Examples of ongoing research by Brown University's Department of Archaeology, one of the international groups at work in Petra, are available at www.brown.edu/Departments/Anthropology/Petra/excavations/excavations.html.

As cultures emerge and mingle, some elements change and some persist.

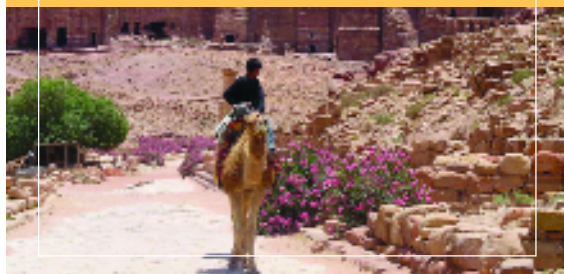
Cultures influence each other through commerce, conquest, and other kinds of communication. Some values and ideas prevail and are assimilated, while others encounter resistance and never take root. Through trade, Petra came into contact with Egyptian, Greek, Roman, and Byzantine cultures, providing a particularly vivid example of how highly diverse cultures may interact over time. As the city grew, these contacts influenced the style and content of Petra's art, architecture, religion, and language. Yet, the city never lost its own unique character. For example, although the Nabataeans attributed characteristics of Greco-Roman gods to many native deities, they continued to represent and worship their ancestral deities in distinctly Nabataean ways. After the Roman Empire took over the city in 106 A.D., this pattern of adaptation and integration contributed to the city's remarkably peaceful history.

Places are defined by both geography and by their inhabitants' modification of the environment.

People everywhere confront the task of shaping the natural world to create places that accommodate their needs and reflect their values. Petra nestles in a rocky basin entered by means of a deep chasm called the Siq, a strategically located pass that cuts through western Jordan's arid and rugged Rift Valley. The Nabataeans overcame serious environmental constraints: meager annual rainfall, seasonal flooding, drought, and earthquakes. Relying on camels to move goods across the barren sands, these desert traders took over the Arabian Peninsula's incense and spice trade and settled in Petra. Water management and revenue from trade enabled them to transform the site from a tribal defensive stronghold and religious center into the thriving, agriculturally-based seat of an expanding commercial empire.

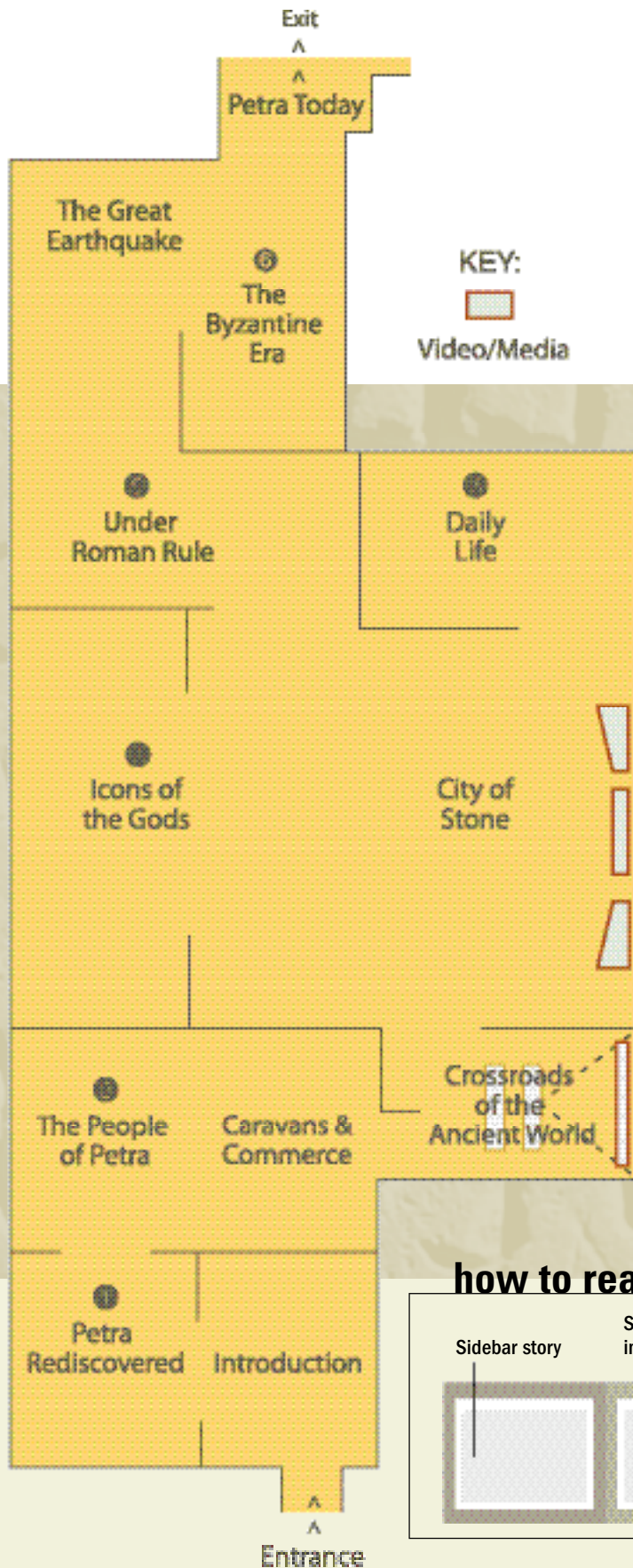
Technology and invention shape society.

Science and technological innovation are integral to social and cultural evolution—they change people's relationship to the land and to each other. The Nabataeans' technological capabilities enabled them to transform the rugged rocks and desert into temples and gardens. Sophisticated waterworks were the key. Still used by present-day Bedouins, a network of waterways and cisterns stored water from distant springs. An elaborate system of damming, terracing, and irrigation made farming possible on the surrounding plateau. More than 800 tombs and over 3,000 architectural elements carved from sandstone and limestone attest to the Nabataeans' genius as architects and stonemasons. Many of these technological achievements fell into disuse after a devastating earthquake in 363 A.D., by which time Roman trade routes were bypassing Petra, and the city entered a long period of decline. Petra was ultimately abandoned in the seventh century A.D.





PETRA LOST CITY OF STONE



Petra Rediscovered ①



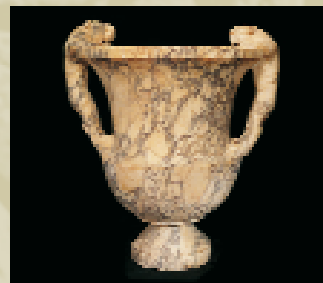
④ Icons of the Gods



The People of Petra ②



⑤ Under Roman Rule

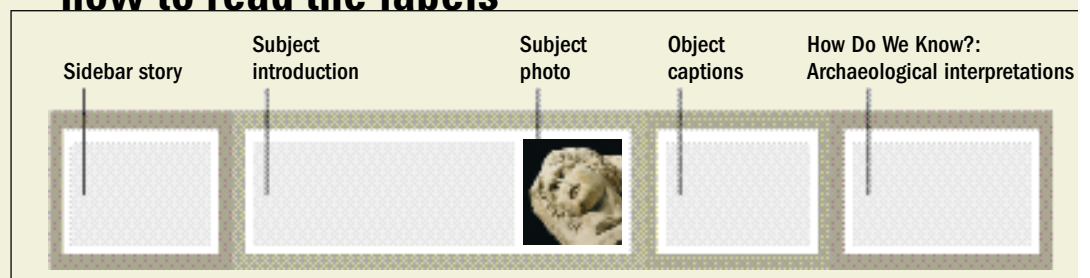


Daily Life ③



⑥ The Byzantine Era

how to read the labels



teaching in the EXHIBITION



Explore one or more of the four themes below, which correspond to the key concepts and which represent possible tours through the exhibition. Each directs you and your students to specific artifacts and/or media elements that explore the theme. (Locations are indicated in italicized text.) You can ask your students the sample questions in order to guide their interaction with the exhibition. Some questions draw on observation alone, while others require reading the labels. Archaeologists infer meaning from artifacts, and this section asks students to engage in the same process.

ARCHAEOLOGY AND ANCIENT CIVILIZATIONS

Archaeologists ask and answer questions about people who lived long ago. This is important at Petra because there are few well-preserved Nabataean writings.

Bearded male head (*The People of Petra*)

Carved from limestone, this head evokes a Persian style that dates back roughly 2,600 years. Its carving style identifies it as Nabataean.

Why do archaeologists think this man is a priest?

What does this sculpture have in common with the terracotta

Figurine of male priest in the *Icons of the Gods* section?

Find other religious artifacts in the exhibition. What do they tell you about the Nabataeans' religious practices?

Decorated incense altar (*Caravans and Commerce*)

The Nabataeans grew rich by controlling the trade in frankincense and myrrh from southern Arabia that was burned on altars like this one.

How might we know that incense was burned on this object?

Find the **Stand for incense** altar. Where did the Nabataeans burn incense? Why do you think they chose those places?

Papyrus scroll fragment (*The Byzantine Era*)

This will of a wealthy Christian Nabataean, written five centuries after Petra's peak, was found in one of the city's Byzantine churches.

How were archaeologists able to figure out what the papyri say?

Why were archaeologists surprised by what the scroll documents?

CONTINUITY AND CHANGE IN CULTURE

While absorbing ideas and styles from many contemporary societies—Greece, Rome, Egypt, and as far-flung as India—Petra's art and culture retained a unique Nabataean character.

Look closely at these three Egyptian statuettes:

1. Egyptian statuette with Osiris (*Caravans and Commerce*)

This statue, which depicts a priest holding Osiris, the Egyptian God of the Dead, comes from Egypt. It dates from the sixth century B.C.

2. Fragmentary statuette of Isis (*Icons of the Gods*)

Details of this figure's clothing identify her as the Egyptian goddess Isis, carved from alabaster in the first century A.D.

3. Figurine of mourning Isis (*Icons of the Gods*)

This Nabataean terracotta figurine from the second century A.D. shows Isis grieving for her dead husband, Osiris.

What do these three statues have in common? How and where are they different?

What do their ages tell you about the way symbols and beliefs traveled through this part of the ancient world?

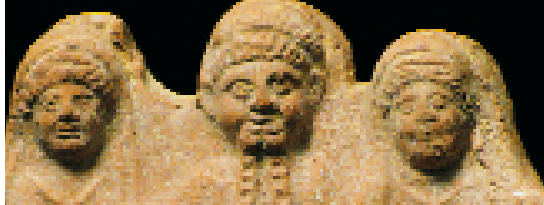
Stele with *baetyl* (*Icons of the Gods*)

The Nabataeans worshipped their gods in the form of standing stones called *baetyls*, or god-blocks, which marked the actual presence of the deity.

Look for other god-blocks on display. How do they resemble this very stylized human face? What other culture influenced the way this goddess looks?

before your visit

- Use the timeline and map insert to contextualize your study of Petra: when the city flourished, and where. What other civilizations emerged or declined during this time, and why? Ask students what they'd like to know about life in Petra. What might have attracted people to this particular place? What resources would be needed to support an emerging city in this rocky valley?
- Initiate a discussion about the nature of trade. What gives trade goods value? How do the goods travel? What kind of infrastructure is necessary to sustain and profit from trade? What do students trade among themselves, and why?
- Learn to analyze artifacts. Bring in an object from home—ideally something that may be unfamiliar to students—and ask students to do the same. In groups of three or four, invite students to describe and draw the physical characteristics of one of the objects, and discuss the possible function and meaning of the object.
- Discuss why archaeology is important. What do archaeologists do? How does this discipline teach us about the past, especially in the absence of written records? What kinds of things can we learn about our own and other cultures from earlier civilizations? Reflect on how new tools or differing points of view might influence interpretations of the past.
- Consider your own community as a potential archaeological site. Identify different structures as public or private, commercial or recreational, decorative or part of the hidden infrastructure that supports urban life. How did you make these distinctions? What objects or structures would survive over time, and what kinds of clues about their function and value might they offer to future investigators?
- Map a classroom or schoolyard. In pairs, students should use markers, rulers, and paper to draw a detailed plan. Students should measure and record all features, and include a key. Ask students to exchange maps and evaluate their accuracy.



Plaque inscribed in Greek and Nabataean (*Under Roman Rule*)

This marble plaque reflects the deep roots that Greek culture and language established in the Near East, due to the travels of Alexander the Great.

Think of examples in our culture where different languages coexist as they did in ancient Petra? Why do you think this happens?

Explore other areas of the exhibition. What other examples of Greek influence on Petran art and architecture can you find?

PEOPLE, PLACES, AND ENVIRONMENT

Settled at the crossing of two ancient caravan routes, Petra sheltered desert traders (for a fee) and played an important role in the economy of the ancient world. Soft bedrock provided a splendid medium in which the citizens displayed their wealth and artistry, venerated their gods, and honored their dead.

Video wall (*City of Stone*)

Many of these structures are sculpture on a very large scale, made by hollowing out the bedrock. Grand tombs honored the dead within.

How do you think it would feel to walk up to these massive structures? Why do you think the Nabataeans made them that way?

Camel relief (*Caravans and Commerce*)

This photograph shows a camel caravan carved in the entrance to the city. Each animal bore a heavy load of incense, spices, perfumes, and textiles.

Why would the Nabataeans choose to carve this scene into rock?

What made camels ideal for desert trade?

Handle with female figure (*Caravans and Commerce*)

Nearly everything that was traded in Petra was perishable. This handle is the only surviving evidence of the Nabataeans' lucrative trade in Indian ivory. It was probably carved in the area that is now known as Pakistan.

Which Petran trade goods could survive best over time? What role might climate and storage conditions play in the survival of artifacts?

Find the **Column capital with elephant heads** (*Caravans and Commerce*)

What does it have in common with the pin handle? What did elephants symbolize to the Nabataeans?

SCIENCE, TECHNOLOGY, AND SOCIETY

Superb architects and engineers, the Nabataeans constructed more than a thousand rock-cut tombs and altars in addition to dwellings, aqueducts, and freestanding monuments. A sophisticated water network sustained a city of nearly 20,000 at Petra's height, around 50 A.D.

Crossroads of the Ancient World (*Video Theater*)

and Rock-hewn Petra (*City of Stone*)

Most of the grand architecture in Petra consists of tombs chiseled into the sandstone cliffs.

Explore the steps involved in creating these magnificent structures. Why do you think the masons and stonecutters worked in this sequence? What techniques are surprising? Which tools are used today?

Petra once looked very different, not just because its structures were intact, but because they were also covered with stucco and painted brilliant colors. Imagine the city at its height. How do you think its original visual effect compares to that of today's grand ruins?

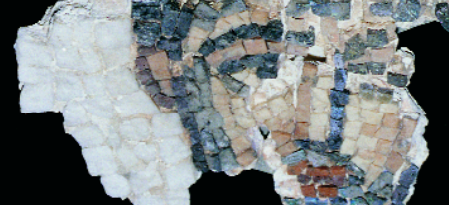
Interlocking water pipes (*City of Stone*)

These ceramic pipes were part of an extensive waterworks system for irrigation, public works, and flood control. Ancient Petran dams and terraces are being reinstated by archaeological teams to prevent water damage to the site.

Engineers built and maintained a large pool and garden complex in the city center. What does this suggest about Nabataean priorities?

while you're at the museum

- Text throughout the exhibition contains sections called "How Do We Know?" that focus on archaeological techniques. Ask students to locate three of these sections and to identify what tools archaeologists rely on to answer these questions. What disciplines (e.g., chemistry, physics) are involved?
- The map page of this guide pictures six artifacts from the exhibition. Distribute photocopies of the map page to your students and ask them to locate the items in the exhibition. A booklet of these images can also be printed from the Web site (www.amnh.org/education/resources/exhibitions/petra/). For each item, ask the students why they think it was placed in that location. What aspect of Petran civilization does the item exemplify or help explain?
- Ask students to form groups of three to four and to look for stories about the lives of the residents of Petra. ("One Woman's Records" in *Under Roman Rule*, and "Reluctant Christians?" and "A Man of Property" in *The Byzantine Era*). What interests your students about the stories? Where does the information about these people come from? What more would they like to know about each person's daily life? Students should take notes and share their questions and insights with fellow students back in the classroom.
- The names given to various places in Petra do not necessarily reflect what the inhabitants called them. The original names have been lost. Ask students to go through the exhibition, and consider the aptness of names assigned to various structures, such as The Treasury. Which places might they rename, and why?
- The exhibition contains many artifacts that relate to urban life in Petra. Ask students to divide a piece of paper into quarters and to choose four objects: one that was used in daily life, a second that had a religious purpose, a piece of currency, and something decorative. Have them draw each one.
- Ask students to locate an artifact that interests them, and to imagine that they have discovered it. Have them write a letter to a museum curator. What questions would they ask about the object's origin and purpose? The letter should include a detailed drawing and description of the artifact.





back in the classroom

connections to other exhibits in the museum

- Walk through the **Akeley Gallery Hall**, where a temporary exhibition of photographs of Bedouin life portrays Petra's present-day inhabitants.
- Compare the elephants in the **Hall of Asian Mammals** with those in the **Akeley Hall of African Mammals**. Which more closely resemble the elephant capitals on display in the Petra exhibition? For your answer, sketch and describe the evidence.
- Visit the **Hall of Asian Peoples**.
 - Consider what the *Golden Wares of Samarkand* display shows about trade routes established in the time of Alexander the Great.
 - Investigate the Bedouin way of life by observing the tent in the case to your right, and the figure and diagrams in the case next to it. Do the two statuettes resemble any in the Petra exhibit?
- Explore the **Hall of Planet Earth** to learn where and why earthquakes occur. Ask students to view the Earth Bulletin and determine the relationship between plate tectonics and recent earthquakes in the Middle East.

LINKS TO LEARNING STANDARDS

The exhibition and activities in this guide fulfill the following standards:

New York State Standards for Social Studies

Standard 2: World History; Standard 3: Geography

New York State Art Standards

Standard 2: Knowing and Using Arts Materials and Resources

National Curriculum Standards for Social Studies

Thematic strands: 1 - Culture; 2 - Time, Continuity, and Change; 3 - People, Places, and Environment; 8 - Science, Technology, and Society; 9 - Global Connections



- Maps record how our surroundings change over time. Students should find an early map of their town or neighborhood, as well as a recent version. Ask them to visit an area identified on the map, and to compare what they see with what each of the maps show. What features are constant and what has changed? What evidence can they find of past structures and land or water use? (For example, what do place names suggest?) What do the changes tell us about the way social and economic changes have shaped the physical landscape?
- Ask your students to choose the identity of someone living in Petra in 50 B.C. (e.g., temple attendant, rock carver, camel herder, merchant, potter, etc.). Then have them write a letter to a friend that describes their lives, including daily activities, whom they spend time with, and their interests and concerns.
- For younger students: Find color pictures of ancient buildings or artifacts (one per student or small team). Working with up to three groups at a time, tear each picture into five pieces, keeping one piece and sticking the remaining pieces up on the classroom walls in random order. Hand out the reserved pieces and ask the students or teams to reassemble the original photographs.
- Review the Petra timeline insert with your class. Ask students to create chronological charts of their lives, complete with a timeline. Can they divide the chart into "eras" or "ages"? What events, such as a trip to another country or a religious rite of passage, reflect cultural influences? Can they identify events in their neighborhood, their town, or the larger world that might have affected them?
- On the timeline insert, note the number of ancient civilizations that built massive structures. Ask students to choose and research two—for example, the Hopewell earthworks and the Moche pyramids—and compare their architecture, engineering and purpose to that of Petra's monuments.
- Copy and distribute the map on the insert. Challenge students to use atlases and maps to draw in present-day borders and indicate countries and cities.

RESOURCES FOR LEARNING:

For a book list, related Web sites, and additional activities visit:
www.amnh.org/education/resources/exhibitions/petra/



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