

# Fossil Detectives

## 1. Question & Research Task

Imagine that you are a detective, but not just any detective. You investigate and discover the mysteries of the past!

The kind of detective you will become is a paleontologist. Your teacher will show you a [YouTube video](#) telling you what that is! You will need to use the clues left for you by plants and animals from long ago.

Think about these questions as you follow the clues.

- How is the history of life written in the rocks?
- How is a paleontologist like a detective?



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Video and song: youtube.com

**In this Slam Dunk, you will conduct brief, focused research to respond to the inquiry question:**

**How can a fossil tell us about the past?**

## 2. Information Sources

SLIDE NAVIGATION

[1](#)

[2](#)

[3](#)

[4](#)

[5](#)

[6](#)

[Next](#)

The resources listed below will provide you with more information about fossils. Gather information about one fossil and fill in the [Fossil Detective Clue Chart](#). Ask your teacher which links are best for you.

Remember the essential question:

**How can a fossil tell us about the past?**

### Silver Star Resources

[Meet a Paleontologist](#)

[Ammonite](#)

[Herring](#)

[Allosaurus](#)

[Triceratops](#)

[Tyrannosaurs Rex](#)

[How Fossils are Formed](#)

[The Big Dig](#)

### Gold Star Resources

[Fossils](#) (Gale in Context Elementary)

[Fossil Finding](#)

[Different Types of Fossils](#)

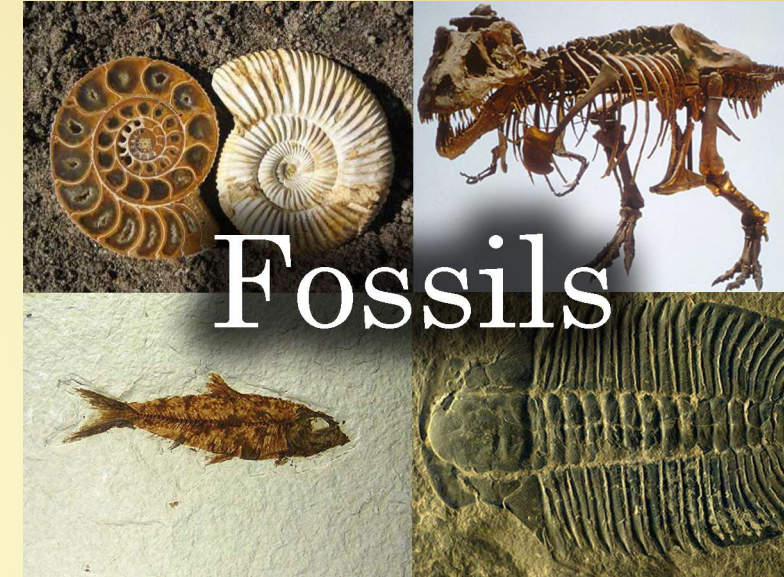


Image Source: Picodrome Public Domain Pictures



### 3. Student Activity

You will choose one fossil to investigate as directed by your teacher. Use the websites on the previous slide to conduct your research.

As you research, be sure to pay close attention to the clues you uncover about your fossil. You will need to infer information about your fossil's environment as you work through the resources.

The information that you gather will help you in your final activity.





## 4. Assessment Activity

How can a fossil tell us about the past?

Now you are going to show what you have learned!

You will create a trading card to share with your classmates. Be sure to reference the rubric to ensure you have included the necessary information on your card.

Save your trading card on the shared drive as directed by your teacher.

Be ready to share your trading card with the class!



# 5. Enrichment Activities

Create your own dig site for you and your friends! Learn how to make fossils and dig them up!



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Excavate the chips from a cookie!  
Pretend you are a paleontologist and using your digging tools (a toothpick) carefully unearth the delicious chocolate morsels.

Check out these fun online activities to learn more about fossils!

- [Virtual Tour of the Smithsonian Natural Museum of Natural History](#)
- [Learn More about National Fossil Day](#)

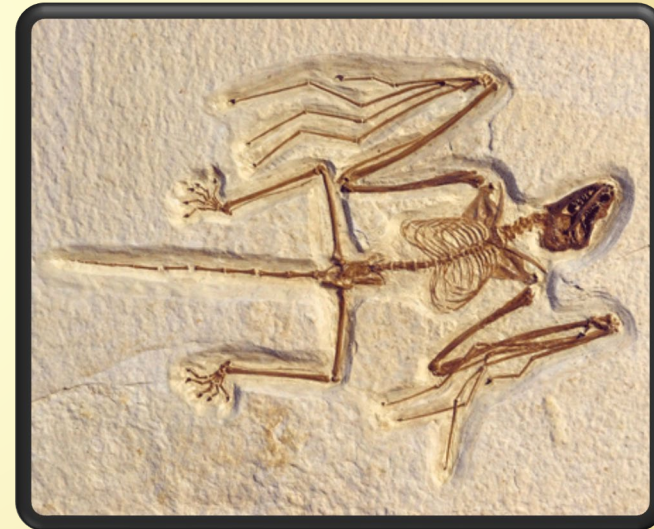


Image Source: National Park Service



# 6. Teacher Resources

<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>
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## Learning Standards Alignment

### Common Core State Standards for English Language Arts & Literacy

**Reading: 1.** 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.

**Writing: 7.** Conduct short as well as more sustained research projects based on focused questions, demonstrating understanding of the subject under investigation.

**AASL Standards Framework for Learners** Inquire: Build new knowledge by inquiring, thinking critically, identifying problems, and developing strategies for solving problems.

Think: Learners display curiosity and initiative by:

I.A.2 Recalling prior and background knowledge as context for new meaning.

Create: Learners engage with new knowledge by following a process that includes:

I.B.1 Using evidence to investigate questions. I.B.3 Generating products that illustrate learning.

Share: Learners adapt, communicate, and exchange learning products with others in a cycle that includes:

I.C.1 Interacting with content presented by others.

Grow: Learners participate in an ongoing inquiry-based process by:

I.D.2 Engaging in sustained inquiry.

### P21 Framework: 21<sup>st</sup> Century Student Outcomes

**3. Information, Media & Technology Skills: Information Literacy:** Access information efficiently and effectively; Use information accurately and creatively for the issue or problem at hand.

**ICT Literacy:** Use technology as a tool to research, organize, evaluate and communicate information.

## Grade 4 Science-Fossils

- **Time Frame:** Two 50 - minute lessons in the computer lab

### Differentiation strategies for this lesson:

- Have students use learning supports provided in BCPS Digital Content found in the [Apps Portal](#). Refer to [Digital Content Snapshot/Support pages](#) as needed.

### Notes to the teacher:

- Collaborate with your school library media specialist to plan and implement this lesson.
- Provide students with login information as needed to authenticate BCPS Digital Content. Login information is available on the **BCPS Digital Content** page found via the [Apps Portal](#)
- Open the first page of the Slam Dunk with students. The link to the [I am a Paleontologist Song](#) is on YouTube, so you will need to share this with students since they do not have access to YouTube.
- For the final assessment, students will need the student template for the trading card. The teacher can use Google Slides to create a compilation of the class' final trading cards.
- This Slam Dunk Lesson includes links to YouTube videos which the teacher/librarian should screen for the class.
- Slide #2, may require a brief reminder to students to avoid ads.