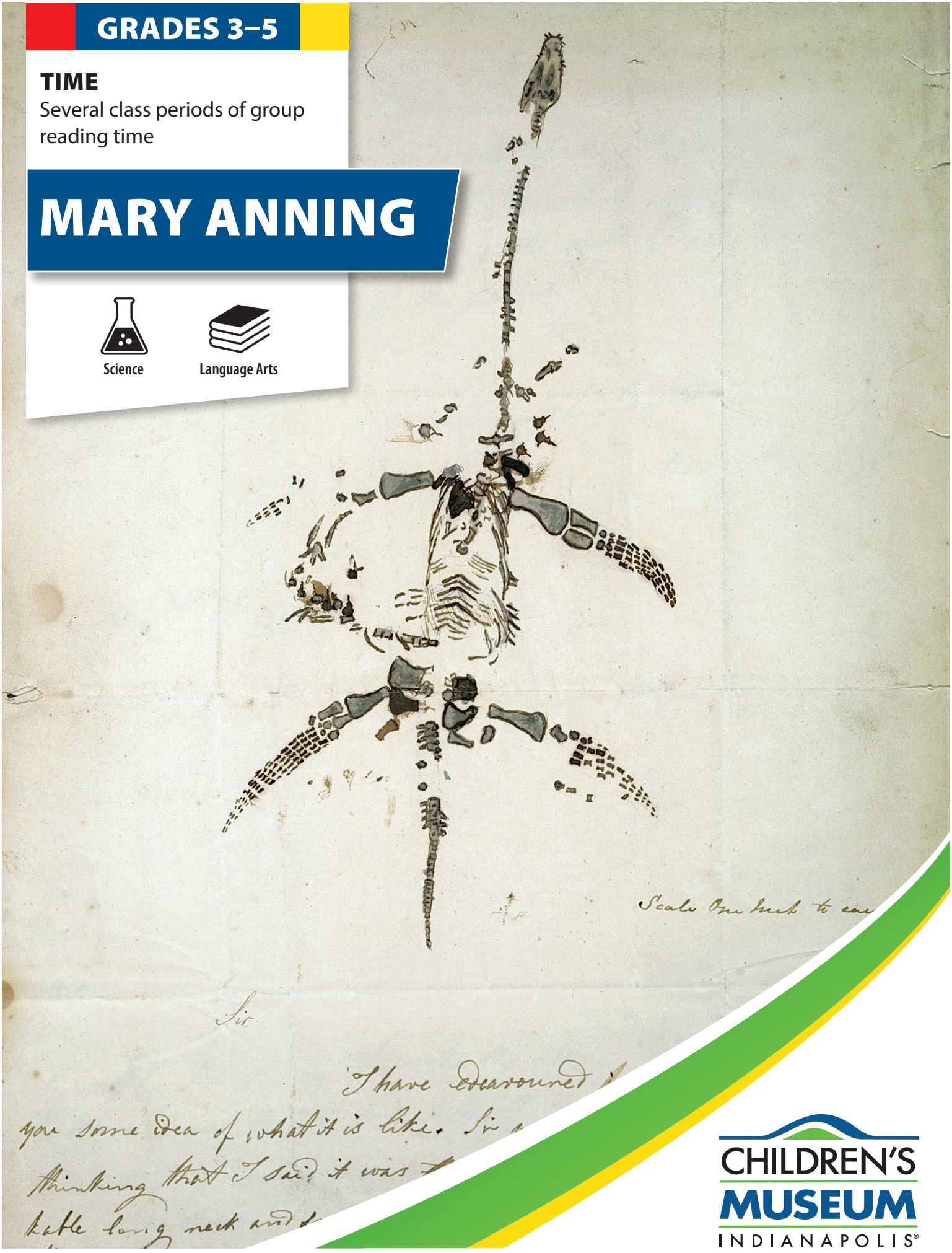
GRADES 3–5

TIME
Several class periods of group reading time

MARY ANNING

Science

Language Arts



CHILDREN'S MUSEUM INDIANAPOLIS®

MARY ANNING

The Children's Museum's lessons are designed to weave classroom experiences and museum education together. All lessons are interdisciplinary and can be used as individual classroom experiences or in combination to create a cohesive unit. Lessons are optimized when used in connection with museum virtual programs and field trips.

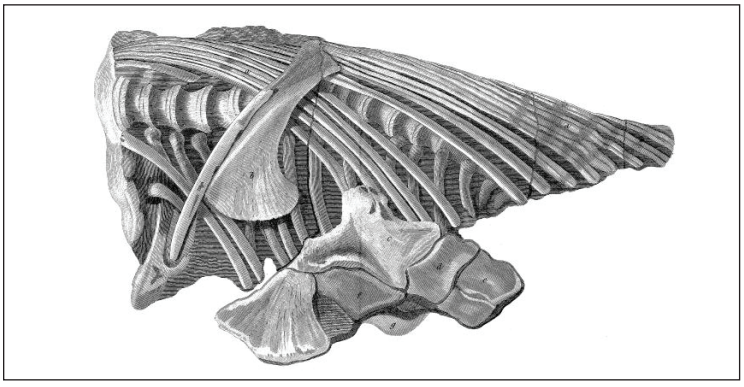
In this lesson, students will learn about a woman named **Mary Anning**, commonly know as one of the greatest **fossilists** in the world. Through reading, students can learn about both narrative and story elements and connect them to science concepts. After learning science concepts, students can also seek out stories to illustrate what they have learned. Literature can bridge the stories of the lives of inspirational scientists with their discoveries.

FOCUS QUESTIONS

- Where was Mary Anning from?
- How old was she when she found her first fossil?
- What aquatic reptile was she the first to find?
- How did being a woman make working as a **paleontologist** more challenging for Mary Anning?

MATERIALS

- Book or Articles about Mary Anning
- Graphic Organizer (back page)
- Suggested Reading Materials



Drawing of part of the skeletal remains of Temnodontosaurus platyodon, the first ichthyosaur found by Anning – from Everard Home's 1814 paper

INDIANA ACADEMIC STANDARDS

Science: 3.2.4

Language Arts: 3.RN.2.1, 3.RN.2.2, 3.RN.2.3, 4.RV.1, 4.RN.2.1, 4.RN.2.2, 4.RN.2.3, 5.RN.2.2, 5.RN.2.3

OBJECTIVES

Students will:

- Read or listen to the story a famous pioneering female paleontologist.
- Identify the importance of the Lyme Regis area in terms of recovery of fossils of Jurassic marine life.
- Students will be able to explain how Anning's ichthyosaur provided proof of extinction never previously known before.

BOOKS

- *Mary Anning's Curiosity by Monica Kulling*
- *History VIPs: Mary Anning by Kay Barnham*
- *Stone Girl, Bone Girl: The Story of Mary Anning by Laurence Anholt*
- *Lightning Mary by Anthea Simmons*
- *Dinosaur Lady: The Daring Discoveries of Mary Anning, the First Paleontologist*
- *The Fossil Girl by Catherine Brighton*

ARTICLES

- "Mary Anning: The unsung hero of fossil discovery" https://www.nhm.ac.uk/discover/mary-anning-unsung-hero.html
- Mary Anning Facts" https://www.natgeokids.com/uk/discover/history/general-history/mary-anning-facts/

Photo Credits: Letter and drawing from Mary Anning (Cover), Mary Anning (1799-1847) / Public domain; Drawing of skeletal remains of *Temnodontosaurus platyodon* (above), Everard Home (1756 - 1832) / Public domain; The Pliosaur Rhomaleosaurus cramptoni dinosaur (page 3), ShutterStockStudio; Landscape of Jurassic coastline (page 3), Martin Kemp, Shutterstock; Science Icons (page 4), valeriyakozoriz / Adobe Stock; Dinosaur Icon (page 4), tettygreen / Adobe Stock

Learn About Mary Anning

PROCEDURES

Teacher Directions

- As a class, in small groups, or individually read a book or article about Mary Anning.
- As students are reading or listening to a book on Mary Anning, have them pay attention to Mary's key discoveries, and STEM skills she used to study fossils, in addition to biographical information.
- The graphic organizer will help students clearly visualize and summarize what they learn, assess their comprehension, and identify questions or clarifications that are needed.

VOCABULARY

- **Mary Anning**
- **Fossils**
- **Paleontologist**
- **Extinction**

Background

Paleontology and collecting fossils was relatively new and very popular when Mary Anning was young. Her family collected fossils to sell in order to supplement their income; Anning embraced this familial hobby and became the 'greatest fossilist the world has ever known'. She lived along the coast of the Lyme Regis region on the eastern shores of of Great Britain. The shores in this region were full of Jurassic marine life. She discovered the first ichthyosaurus and the first plesiosaur. However, although she made many important discoveries, Anning often went uncredited due to her family's lack of social standing and her being a woman. Paleontology is an important study today because it gives scientists an opportunity to look at geological and biological changes over time. It also teaches cause and effect, and the understanding of the magnitude of modern occurrences.

London, England - December 4, 2019: The Pliosaur Rhomaleosaurus cramptoni dinosaur was found by Mary Anning (1799-1847) of Lyme Regis, Dorset. It hangs on the wall at Natural History Museum London.

A landscape of the Jurassic coastline in Dorset England

Name: _____ Grade: _____

Choose a notable figure in the field of science and fill in their information.

Scientist: _____

STEM Field:

Years Active:

Achievements / Discoveries:

Tools / STEM Skills:

Background: