

Jurassic Quest Project Kit

Congratulations! You're going to Jurassic Quest! Use these project ideas to enrich your educational experience. Read through them before you go to make sure you understand the terms and concepts, and to help you determine if you want to expand upon any of them. You'll find fun facts and printable worksheets at the end of this packet.

a- elementary level activity b- middle school level activity c- high school level activity

Language Arts

Jurassic Quest inspires the imagination. So much excitement and mystery still surrounds the Jurassic era. Imagine living in the time all these dinosaurs were alive. Do they look as dangerous as they are? Could you have had one as a pet? Would there be different laws or safety measures implemented because of the giant beasts? Use your imagination and what you see at the exhibit to do some creative writing.

- a. Draw a storybook or write a short story with illustrations inspired by the exhibits you see.
- b. Write a short story inspired by your visit, including a main character and the main elements of a story (setting, plot, conflict, and resolution).
- c. Choose between writing a fictional first-person narrative or a screenplay inspired by your visit.

Materials required: Notebook, pen/pencil

Submission: A copy of your writings/drawing, and any pictures/videos

Applied Math

Paleontologists use math every day. Measuring and cataloging specimen needs to be done with precision. Explore the exhibit for clues to what kind of math is needed to study the dinosaurs and their fossils.

- a. Go on a shape hunt. Draw and label the shapes you find. Also, draw a representation of at least two patterns you find.
- b. Identify at least one fossil which is described using math. Record the measurements listed and any other numbers in the description. Explain how the scientists came up with those numbers and why they are important.
- c. Math is everywhere. Imagine you are one of the people working in the lab. Describe your project and what you would need to know and do to complete it. Choose at least one application of math that you see, estimate measurements, and use calculations to show how the scientist does her job.

Materials required: Notebook, pen/pencil, calculator or smartphone (optional) Submission: Your calculations, estimations, and conclusions, and any pictures/videos

Science

Paleontology is the study of ancient life. Learning about life which has come before is important to the way our modern world works. From better understanding modern animals to helping find crude oil, paleontologists have a lot to do. Explore the world of paleontology on your trip.

- a. Draw and/or write about one aspect of paleontology which interests you.
- b. Explore deeper into one of the many jobs a paleontologist can perform. What do they need to know? What are they trying to learn? How can their work help us today?
- c. Imagine you are curator at the Jurassic Quest Exhibit. You oversee all of the work done in the exhibit. What things would you need to know to do your job? What tasks would you need to complete in a day, and what tasks would you delegate and to whom? Would it be important for the curator to also be a paleontologist? Why or why not?

Materials required: Notebook, pen/pencil

Submission: A copy of your drawings, diagrams, or designs, and any pictures/videos

Social Studies

The Jurassic Age is only one of multiple periods of the dinosaur age. Research each one and see which interests you most. How did dinosaurs change in appearance, evolution and adaptation from the Triassic period into the Jurassic period and through the Cretaceous period? What kinds of other animals were there if any? What is the importance of studying ancient life and creatures? How do we apply this knowledge in modern science other than just curiosity?

- a. Write or draw about a dinosaur at one distinct time in the past. Make sure to include the period you chose and why.
- b. Choose one period of time and its impact on dinosaurs as a whole. Describe its nuances and why it is so important to learn about. Be sure to include time periods and any major events.
- c. Choose one of the three periods (Triassic, Jurassic or Cretaceous) and create a timeline of that period based on what you've learned. Include descriptions of environment changes, weather changes, dinosaur evolutions and adaptations they needed to accommodate those major environmental changes etc. Include a short essay on the significance of the period to our modern day.

Materials required: Notebook, pen/pencil, smartphone (optional)
Submission: A copy of your writings/drawings, and any pictures/videos

FUN FACTS

- The word dinosaur comes from the Greek language and means 'terrible lizard'. The word was coined by English paleontologist Richard Owen in 1842 and was meant to refer to Dinosaurs impressive size rather than their scary appearance.
- The first dinosaur to be named was Megalosaurus. It was named in 1824 by Reverend William Buckland. Megalosaurus means 'great lizard'.
- The speediest dinosaurs were the ostrich mimic ornithomimids, such as Dromiceiomimus, which could probably run at speeds of up to 37 miles per hour
- The dinosaur with the longest name was Micropachycephalosaurus meaning "tiny thick-headed lizard". Its fossils have been found in China, and it was named in 1978 by a Chinese paleontologist.
- At present over 700 different species of dinosaurs have been identified and named. However, paleontologists believe that there are many more new and different dinosaur species still to be discovered.

<u>Jurassic</u> Quest

4. Describe or draw your favorite dinosaur.
5. Describe or draw a new dinosaur you never heard of before
your trip.
6. What is one thing you learned about dinosaurs you didn't know?

BoNus:
Dinosaurs evolved through time to adapt to the changes in the environment whether because of climate, weather, or changes in the Earth. Plant life also changed and evolved from these same factors. How can studying these ancient evolutions of earth, creatures and plant life be applied for the
modern sciences? Can it be applied to today's life in any way? How? Do we?

