A Career as a Paleontologist

What do paleontologists study?

When you hear the word “paleontology,” you may think “dinosaurs!” However, paleontology is more than just the study of dinosaurs. Paleontologists study the history of life on Earth—as found in the fossil record. There are many subdivisions of the field of paleontology. **Vertebrate paleontology** is the study of fossils of animals with backbones. **Invertebrate paleontology** is the study of fossils of animals without backbones. **Micropaleontology** is the study of fossils of single-celled organisms. **Paleobotany** is the study of plant fossils. **Taphonomy** is the study of how fossils form and how they are preserved. **Paleoecology** is the study of ancient ecosystems and how they developed.

What can I do now, if I want to be a paleontologist?

If you enjoy learning about Earth’s past, you may want to consider a career as a paleontologist. It is really important that you focus during your math and science classes. In math and science you will have a good introduction to paleontology. You can also research and read books, visit museums, and watch educational television shows to learn about the history of Earth. Remember, no matter how interested or knowledgeable you are in paleontology, by going to college you will be exposed to much, much more.

What happens in college?

A strong background in the sciences is absolutely essential when studying paleontology in college. In college, you will enroll in classes such as biology, geology, chemistry, and math. You will also take courses in mineralogy, ecology, and zoology. Since you will most likely travel to different countries, like Mexico or Germany, you are expected to learn a foreign language. Expect to take classes in computer literacy too; you must be familiar with different computers and computer programs.

What about field work?

Although college courses are the most important part of training to become a paleontologist, first-hand experience in the field is also very important. Being “in the field” means that you are working closely with an experienced paleontologist in an actual fossil dig. Through this experience, you will receive first hand training on methods used to find, collect, categorize, clean, and prepare fossils. Field work will give you experience you cannot get from a classroom. Expect to sleep on tents, make your own food, and to work long days.

Where can paleontologists work?

Most paleontologists are college and university professors. Many work in museums conducting research, curating, and preparing exhibits. Some paleontologists work for the government and they conduct geological mapping. Other paleontologists work for private companies, such as oil companies, searching for petroleum under the Earth’s layers.

Paleontology is fun, thrilling, and fascinating. It is also hard work. You can take steps now to prepare yourself to explore a career as a paleontologist.
1. What is a paleontologist?
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2. What is the study of plant fossils called?
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3. If a student likes to learn about Earth’s past, what are two things he/she can do outside of school to learn even more?
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4. What are some courses a paleontology student might take in college? Why are they important?
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5. What should a student studying paleontology expect when conducting field work?
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6. Give two examples of jobs a paleontologist might have.
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7. What two subjects are very important for students who want to pursue a career in paleontology?
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8. Are you interested in becoming a paleontologist? Why or why not?
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Key:

1. What is a paleontologist?
   A paleontologist studies the history of life on Earth as found in the fossil record.

2. What is the study of plant fossils called?
   Paleobotany is the study of plant fossils.

3. If a student likes to learn about Earth’s past, what are two things he/she can do outside of school to learn even more?
   Example: A student can visit museums and watch television shows about Earth’s past.

4. What are some courses a paleontology student might take in college?
   Why are they important?
   Example: A foreign language to communicate with people in a different country and zoology to learn about different animals.

5. What should a student studying paleontology expect when conducting field work?
   Example: Students will receive first hand training on methods used to find, collect, categorize, clean, and prepare fossils. They can expect to sleep on tents, make their own food, and to work long days.

6. Give two examples of jobs a paleontologist might have.
   Examples:
   - Working in museums as they conduct research and prepare exhibits
   - Teaching at colleges and universities
   - Working with the government doing geological mapping
   - Working with oil companies searching for petroleum

7. What two subjects are very important to students wanting to pursue a career in paleontology?
   Math and science

8. Are you interested in becoming a paleontologist? Why or why not?
   Answers will vary.