# Career Spotlight

### Geographer

A geographer is a scientist whose area of study is geography, the study of Earth's physical environment and human habitat. Geographers study not only the physical details of the environment but also its impact on human and wildlife ecologies, weather and climate patterns, economics, and culture.



#### EDUCATION

Graduates with master's degrees in applied specialties usually are qualified for positions outside of colleges and universities, although requirements vary by field. A Ph.D. degree may be required for higher-level positions. Bachelor's degree holders have limited opportunities and do not qualify for most occupations. A bachelor's degree does, however, provide a suitable background for many different kinds of entry-level jobs.

#### WHEN MATH IS USED

Training in math and statistics is essential for many geographers. They are increasingly using mathematical and quantitative research methods to solve the issues and problems dealing with geography. For example, geographers use mathematical calculations in order to identify population centers in the United States and China. Geographers also work extensively with maps and tables.

#### POTENTIAL EMPLOYERS

About 41 percent work for Federal, State, and local governments, mostly for the Federal Government. Other employers include scientific research and development services; management, scientific, and technical consulting services; business, professional, labor, political, and similar organizations; and architectural, engineering, and related firms.

#### MATH REQUIRED

- College Algebra
- Geometry
- Trigonometry
- Calculus I and II
- Quantitative Reasoning
- Statistics

Low-end Salary: \$41,910/yr Median Salary: \$74,760/yr High-end Salary: \$103,870/yr

A literal translation of "geography" would be "to describe or write about the Earth."

The first person to use the word "geography" was Eratosthenes around 200 B.C. He calculated the size of the Earth. Employment of geographers is expected to grow 35 percent from 2010 to 2020, much faster than the average for all occupations. However, because it is a small occupation, the fast growth will result in only about 600 new jobs over the 10-year period.

#### CITATIONS

http://en.wikipedia.org/wiki/Geographer http://en.wikipedia.org/wiki/Geography http://www.bls.gov/ooh/life-physical-and-social-science/geographers.htm#tab-6 http://www.bls.gov/oes/current/oes193092.htm

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