National Aeronautics and Space Administration

Educational Product	
Educators & Students	Grades 5-12

ET-2004-10-101-ARC

Educational Topic

Physical Science Technician

Related Job Titles:

Biological Technician, Chemical Technician, Environmental Technician, Engineering Technician

Job Description:

Physical Science Technicians help scientists and engineers with their products and experiments. They set up and run laboratory instruments. When there are problems with the instruments, Physical Science Technicians fix them. They also check and track experiments, make observations of the experiments, record results, and often make conclusions. Physical Science Technicians gather data from various sources such as field notes, design books, and lab reports. They look at the data and report any errors or data that don't fit with the rest. Physical Science Technicians usually work regular hours and, depending on their area of study, may work in a laboratory or outdoors. They spend a lot of time on the computer.

Interests / Abilities:

- Are you good at solving problems?
- Do you like to use computers?
- Do you express yourself well when you speak and write?
- Do you work well with others?
- Do you like to do science experiments?

Suggested School Subjects / Courses:

- Science (with laboratory activities)
- Math
- Computers

Education / Training Needed:

At least two years of specialized training in science or science-related technology is required to be a technician. This training may be earned at a technical institute, vocational school, from a community college or junior college, or from work experience. It is helpful to have some experience from internships or summer jobs in laboratories.

Areas of expertise:

- *Biology:* assist scientists in studying living things, such as viruses, microbes, and DNA
- *Chemistry:* assist scientists to develop, use, and study chemicals
- *Engineering:* assist scientists and engineers with instruments

Additional Resources:

- American Chemical Society
  http://www.acs.org
- Astrobiology Summer Academy
  http://academy.arc.nasa.gov/
- Earth to Orbit: Engineering Design Challenges
  http://eto.nasa.gov/
- Graduate Student Researchers Program
  http://spacelink.nasa.gov/Instructional.Materials/NASA.Educational.Products/Graduate.Student.Researchers.Program.Brochure/.index.htmlt
- Jobs with the Federal Government
  http://www.usajobs.opm.gov
- MATHCOUNTS Competition
  http://mathcounts.org/
- Minority University Research and Education Programs
  http://mured.nasaprs.com/
- NASA Cooperative Education Program for college students
  http://spacelink.nasa.gov/Educational.Services/NASA.Education.Programs/Student.Support/NASA.Cooperative.Education.Program/.index.html
- NASA Jobs
  http://nasajobs.nasa.gov/
- NASA Office of Space Science
  http://www.hq.nasa.gov/office/oss/
- NASA Quest
  http://quest.nasa.gov
- NASA SHARP Internship Program for high-schoolers
  http://www.mtsibase.com/sharp/
- NASA Student Employment
  http://nasajobs.nasa.gov/stud_opps/employment/index.htm

What can I do right now?

- Take as many math and science classes as you can.
- Participate in science fair projects.
- Call the American Association of Science and Technology Centers for information on science museums in your area that you might visit.
  (202) 783-7200

- NASA Student Involvement Program student contests
  http://www.nsip.net/index.cfm
- Revolutionary Vehicle Concepts and Systems student competition
  http://avst.larc.nasa.gov/competitions.html
- Student's Guide to Astrobiology
  http://www.astrobiology.com/student.html
- Tech-Interns.com
  http://www.tech-interns.com/

Please take a moment to evaluate this product at:
http://ehb2.gsfc.nasa.gov/edcats/educational_topic

Your evaluation and suggestions are vital to continually improving NASA educational materials.
Thank you.

http://quest.nasa.gov/people/index.html