



ANSWER KEY: Hot STEM Careers

Directions:

Using the website <http://careervoyages.gov>, complete the following activities per your teacher's instructions. Remember, all answers should be in complete sentences. If you need more room to record your answers, use notebook paper or the back of this sheet.

- Of the occupations listed on the left-hand menus (High Growth Industries and Emerging Industries), how many would you consider to be STEM occupations? List those here.
8: Information Technology, Health Care, Homeland Security, Energy, Education, Construction, Automotive, and Aerospace.
- From the Aerospace menu, choose Tools and Technology. Choose a video and summarize the information in this area.
Aircraft Mechanics and Service Technicians; Job is to ensure peak efficiency for the aircraft, but the stress can be immense. The benefits, though, are good, including such amenities like free travel. Specialization in the field is common.
- From the Information Technology menu, choose In-Demand Occupations. List the top 3 IT careers based on the projected need. Then sort by projected growth and list those top 3 occupations.
Projected Need Top 3: Computer Software Engineers with 300,000; Computer Systems Analysts with 280,000; Computer Support Specialists with 242,000. Projected growth top 3: Network Systems and Data Communications Analysts; Computer Software Engineers, Applications; and Computer Systems, all with 27+%.
- What is the source of the IT projections? Only a full citation will earn you full credit.
The source is the Bureau of Labor Statistics 2006 wages and 2006-2016 projection series.
- From the Emerging Industries menu, choose any of the occupations listed and then list the top 3 careers based on the projections.
Need for Employees: Sales Reps, Wholesale and Manufacturing, Technical and Scientific Products – 142,000; Veterinary Technologists and Technicians – 51,000; Medical and Clinical Lab Technicians – 46,000
- Now, visit a career area of the site that interests you most. Describe that career and what you learned about that career from this site.
Information Technology: IT is in high demand with the current shortage of workers. Some 92% of all IT workers are in non-IT companies, 80% of which are in small companies. People interested in becoming computer support specialists generally need only an associate's degree in a computer-related field, as well as significant hands-on experience.

7. Of all the careers you learned about from this site, which career has the highest hourly rate? How much is it per hour? How much is it per year? Assume you work 40 hours per week and get paid 52 weeks per year.
Financial Managers, Computer and Information Systems Managers, Engineering Managers, Sales Managers, Physicians, and Surgeons all have the potential to make up to over \$70 an hour.
8. From the main page for students, choose *Where to Start*. In your own words, what are 2 tips it offers?
1. The earlier you start thinking about what you'd enjoy, the better off you'll be.
2. Get your high school diploma or a GED.
9. In your own words, explain why you think there is such a push to get young people excited about STEM careers.
There is a constant demand for people in those fields. Also, with so few people employed in those fields, there is much opportunity to succeed.
10. What did you learn today that will help you choose the right career path? A minimum of two complete sentences that contain facts from the resources will earn you full credit.
Answers will vary.
STEM-related careers are the perhaps among the most successful in the job market. Specialized technicians from physicians to engineering managers, earn top dollars for their craft, making up to over \$70 an hour. Information Technology is among the highest in projected growth, with three occupations topping off with 27+%