

Engineering and Technology Careers

Career Opportunities Worksheet

Please include any additional career topics unique to your participating organization or other available community-based organization.

Career Opportunities Activity Topics	Organization Has Resources	Organization Consultant
	Yes/No	Who can teach this skill?
1. Learn the National Society of Professional Engineers (NSPE) code of ethics.		
2. Build a switch magic project.		
3. Build a Jacob's ladder and high-voltage arc.		
4. Learn soldering techniques.		
5. Build an ohmmeter.		
6. Visit a manufacturer of soft and hard goods.		
7. Construct electronic dice.		
8. Learn model bridge building.		
9. Learn paper airplane design.		
10. Build propelled vehicles that are rubber-band, spring, or mouse-trap powered.		
11. Design a playground set for children.		
12. Tour a construction site with a civil engineer.		
13. Know the roles of six types of engineers.		
14. Visit the Web sites of engineering organizations.		
15. Obtain information on colleges and universities that offer engineering degrees.		
16. Attend an engineering conference.		
17. Participate in engineering science projects, such as		
18. Electronic wheel of fortune		
19. Nerve tester		
20. What IZ it		
21. Balloon staging		
22. Paper rockets		
23. Rocket car		
24. Participate in engineering competitions, such as		
25. Egg drop		

Career Opportunities Activity Topics	Organization Has Resources	Organization Consultant
	Yes/No	Who can teach this skill?
26. Bridge building		
27. Windmill windup		
28. Hand-powered winch		
29. Lord Kelvin's water drop		
30. Missile launch		
31. Participate in National Engineers Week.		
32. Serve as a mentor for a MATHCOUNTS program.		
33. Participate in a superactivity at one of the following locations:		
34. Air Force satellite facility		
35. National Air and Space Museum, Washington, D.C.		
36. Los Alamos National Laboratory		
37. Kennedy Space Center or Johnson Space Center		
38. Using the engineering design method, discuss		
39. How public buildings can be made accessible for disabled persons.		
40. Automobile safety.		
41. The use of fiber optics.		
42. Structural design in reference to September 11.		
43. Brain teasers: List		
44. Six ways to produce electricity.		
45. Six ways to move a vehicle without an engine.		
46. Six ways or more to light a fire.		
47. Six ways to use the jet stream.		
48. Six ways to avoid spilling coffee while driving.		
49. Eight reasons to not explore Mars.		

Engineering and Technology Careers Sample Program Calendar

	First Meeting Date	First Meeting Career Opportunities Topic	First Meeting Adult Consultant/ Youth Chair	Second Meeting Date	Second Meeting Career Opportunities Topic	Second Meeting Adult Consultant/ Youth Chair	Monthly Post Planning Meeting Date	Monthly Post Activity	Monthly Post Activity Consultant/ Youth Chair	Council Activity Programs
September	First Wednesday	Fall firstnighter	Hal, Mark	Second Wednesday	Elect officers	Bill, Martha	Third Wednesday	Participate in the council COPE weekend.	Mike, Mary	
October	First Wednesday	Career Achievement Award	James, Sean	Second Wednesday	Construction site visit	Cliff, Cheryl	Third Wednesday	Begin planning for a post spring break ski trip and fundraising event.	Kim, Jim	
November	First Wednesday	Building a Jacob's ladder and high voltage arc	Frank, Tom	Second Wednesday	Model building computer software	Peggy, Jimmy	Third Wednesday	Participate in council food drive.	Keith, Amy	Learning for Life program conference
December	First Wednesday	Character education activities	Cosby, Judy	Second Wednesday	Straw tower competition	Marty, Mariann	Third Wednesday	Plan a summer superactivity.	Karen, Stephen	
January	First Wednesday	Building a propelled vehicle	Lauri, Mike	Second Wednesday	Airport visit	Jim, Natalie	Third Wednesday	Host an Explorer blood drive.	Adam, Becky	Learning for Life leadership workshop series — 16 components
February	First Wednesday	Paper airplane design competition	Mathew, Danny	Second Wednesday	Switch magic project	John, Cindy	Third Wednesday	Go on a post ski trip.	Michael, Debbie	
March	First Wednesday	Spring break	Tom, Katy	Second Wednesday	Visiting engineering Web sites	Carey, Ann	Third Wednesday	Host a fundraising event.	Roger, Sherri	Learning for Life community services project
April	First Wednesday	Commercial product manufacturers	Cliff, Maya	Second Wednesday	Participating in engineering competitions	Debbie, Murray	Third Wednesday	Go on an outing with post members and their families.	Alex, Gretchen	
May	First Wednesday	Career Achievement Award	Ashley, Amy	Second Wednesday	Designing a playground set for children	Rayna, David	Third Wednesday	Attend an engineering activity and post superactivity.	Jeff, Joanne	Learning for Life character education in Exploring — Four components
June/July	First Wednesday	Planning for a superactivity	Mathew, Monica	Second Wednesday		Faye, Hazel	Third Wednesday	Plan for fall firstnighter.	Brenda, Joe	
August	First Wednesday		Paul, Denise	Second Wednesday		David, Stephanie	Third Wednesday		Ken, Imelda	