

<h1>Engineering Design Brain/Web quest</h1>	Name: _____
	Date: _____
Engineering Design and Problem Solving	Weight = 0.5

DIRECTIONS: Look inside your head and online to find the answers to these questions. **REMEMBER:** This is a webquest so be sure to copy paste the website address to cite your source(s).

**1. WHAT IS THE ETYMOLOGY OF THE WORD “ENGINEER”?
IN OTHER WORDS, WHERE DOES THE WORD COME FROM?**

Source(s):

2. WHAT IS ENGINEERING?

Source(s):

3. IS ENGINEERING DIFFERENT FROM SCIENCE?

Source(s):

**4. WHAT IS S.T.E.M. AND WHAT IS S.T.E.A.M.? WHY ARE THEY LUMPED
TOGETHER? WHAT IS THE IDEA?**

Source(s):

5. ENGINEERING IS EVERYWHERE!!!



A - Z

Engineering is everywhere! From the moment you wake up until you fall asleep and even when you are sleeping, an engineering product is involved. Name engineering related things from A - z.

A-

B-

C-

D-

E-

F-

G-

H-

I-

J-

K-

L-

M-

N-

O-

P-

Q-

R-

S-

T-

U-

V-

W-

X-

Y-

Z-

Source(s):

6. SALARIES OF ENGINEERS

How much does an engineer make on average per year?

Type	Average Salary per year (U. S.)	Source
Petroleum Engineer		
Mechanical Engineer		
Electrical Engineer		
Civil/Structural Engineer		
Industrial Engineer		

7. WHO DO ENGINEERS WORK FOR? WHO HIRES ENGINEERS?

What companies, organizations, businesses, enterprises hire the most engineers?

Institution	(if available) Number of engineers hired or Percentage	Source

8. FAMOUS ENGINEERS

What invention/technology are these famous engineers known for?		
Name	Claim to Fame (Invention or technology they engineered)	Source
Archimedes		
Hero of Alexandria		
Leonardo da Vinci		
Alexander Graham Bell		
George Washington Carver		
Gustave Eiffel		
Thomas Edison		
Beulah Louise Henry		
Gottlieb Daimler		
Willis Carrier		
Henry Ford		
Nicola Tesla		
Robert Goddard		
Elon Musk		

9. TOP 5 ENGINEERING MARVELS OF THE MODERN WORLD

Name and describe 5 of the greatest engineering achievements of the MODERN world		
Name of achievement	Why is it a big deal?	Source
1.		
2.		
3.		
4.		
5.		

10. WHAT ARE THE STEPS OF THE ENGINEERING DESIGN PROCESS?

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Source(s):

11. TOP ENGINEERING PROGRAMS IN THE U. S.

Name six of best engineering schools to study at in the country.

Source(s):

12. Which U.S. University graduates the most engineers? _____

Source(s):

GREATEST ENGINEERING FEATS

13. What is the biggest and most sophisticated machine ever engineered? _____

Source(s):

14. What is the smallest thing humanly engineered? _____

Source(s):

15. What is the biggest and most sophisticated machine ever engineered? _____

Source(s):

16. What is the most prestigious engineering award given out (like the Nobel Prize for engineers)? _____

Source(s):

DIRECTIONS: For any year including or after 2003, answer the following questions:

17. _____ How many engineering jobs are there available in the U. S.?

Source(s):

18. _____ Which of the following engineering field has the most jobs available in the U. S.?

a. Mechanical b. Civil c. Electrical d. Industrial e. Aerospace

Source(s):

19. _____ What is the most popular engineering major (in other words, what engineering major graduates the most students from colleges and universities)?

a. Mechanical b. Civil c. Electrical d. Industrial e. Aerospace

Source(s):

20. _____ There is a common perception that Asians and Middle Easterners are filling the engineering departments of U. S. universities and that Americans are getting left behind. What % of engineers graduating from U. S. universities are not American citizens?

Source(s):

21. _____ Is the percentage of engineering graduates that are of Asian descent (in other words they identify as Asian as their ethnicity) increasing over time?

Source(s):

22. _____ What % of engineers graduating from U. S. universities are women?

Source(s):

23. _____ What % of engineers graduating from U. S. universities are Hispanic?

Source(s):

24. _____ What % of engineers graduating from U. S. universities are African-American?

Source(s):

25. What is one fun fact you learned about engineering not mentioned above? _____

Source(s):