WET-E4
8/19/2013

What is Engineering? What is Technology?

E4

Marking Instructions	
• Use a No. 2 pencil or a blue or black ink pen only. • Do not use pens with ink that soaks through the paper. • Make solid marks that fill the response completely.	**CORRECT:** ● **INCORRECT:** ⊘ ⊠ ◒ ◔

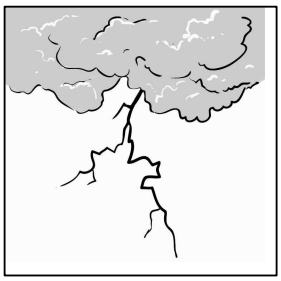
Name: _____ Date: _____

Which of these describe Technology? Choose ALL that apply.

- ○ Must be a computer
- ○ Must solve a problem
- ○ Must be new or modern
- ○ Must be a kind of power
- ○ Must have parts that move
- ○ Must be invented by people
- ○ Must use electricity or power
- ○ Must have a computer inside
- ○ Must have a screen to look at
- ○ Must be a thing you can touch

Is Lightning a kind of technology?

- Ⓨ Yes
- Ⓝ No



Are these things that an engineer would do for his or her job? (YES or NO):

1. Develop better bubble gum	Ⓨ Yes	Ⓝ No
2. Steer ships	Ⓨ Yes	Ⓝ No
3. Install cable television	Ⓨ Yes	Ⓝ No
4. Improve bandages	Ⓨ Yes	Ⓝ No
5. Draw diagrams of new technologies	Ⓨ Yes	Ⓝ No
6. Fix headlights on cars	Ⓨ Yes	Ⓝ No
7. Fly airplanes	Ⓨ Yes	Ⓝ No
8. Nail beams together for new houses	Ⓨ Yes	Ⓝ No
9. Figure out how to package bottles so they don't break	Ⓨ Yes	Ⓝ No
10. Drive trains	Ⓨ Yes	Ⓝ No
11. Come up with ways to keep soup hot for a picnic	Ⓨ Yes	Ⓝ No
12. Develop smaller cell phones	Ⓨ Yes	Ⓝ No
13. Invent warmer kinds of cloth	Ⓨ Yes	Ⓝ No
14. Drive motor boats	Ⓨ Yes	Ⓝ No
15. Operate cranes	Ⓨ Yes	Ⓝ No

PLEASE DO NOT WRITE IN THIS AREA

[SERIAL]

53 52 51 50 49 48 47 46 45 44 43 42 41 40 39 38 37 36 35 34 33 32 31 30 29 28 27 26 25 24 23 22 21 20 19 18 17 16 15 14 13 12 11 10 9 8 7 6 5 4 3 2 1

Are these things that an engineer would do for his or her job? (YES or NO):

16. Improve camera lenses	Ⓨ Yes	Ⓝ No
17. Invent waterproof materials	Ⓨ Yes	Ⓝ No
18. Design tools for surgery	Ⓨ Yes	Ⓝ No
19. Improve a truck by putting new wheels on it	Ⓨ Yes	Ⓝ No
20. Build chimneys out of bricks	Ⓨ Yes	Ⓝ No
21. Design ways to clean polluted air	Ⓨ Yes	Ⓝ No
22. Drive garbage trucks	Ⓨ Yes	Ⓝ No
23. Figure out ways to explore the ocean	Ⓨ Yes	Ⓝ No
24. Run machines for doctors and scientists	Ⓨ Yes	Ⓝ No
25. Install wiring	Ⓨ Yes	Ⓝ No
26. Fix computers	Ⓨ Yes	Ⓝ No
27. Think about ways to clean the air	Ⓨ Yes	Ⓝ No
28. Figure out what materials to use to make bridges	Ⓨ Yes	Ⓝ No
29. Put shelves together in a store	Ⓨ Yes	Ⓝ No
30. Design smaller kinds of computers	Ⓨ Yes	Ⓝ No
31. Drive racecars on a racetrack	Ⓨ Yes	Ⓝ No
32. Pour cement for new roads	Ⓨ Yes	Ⓝ No
33. Measure how much weight materials can hold before they break	Ⓨ Yes	Ⓝ No
34. Figure out how tall you can safely build towers	Ⓨ Yes	Ⓝ No
35. Cut glass to make windows in buildings	Ⓨ Yes	Ⓝ No
36. Pack furniture into boxes in a factory	Ⓨ Yes	Ⓝ No
37. Repair cars	Ⓨ Yes	Ⓝ No

How important are each of the following activities to the work of an engineer?	Not Important		Sort of Important		Very Important
38. Using math	⓪	①	②	③	④
39. Driving machines	⓪	①	②	③	④
40. Using models	⓪	①	②	③	④
41. Testing ideas	⓪	①	②	③	④
42. Building houses	⓪	①	②	③	④
43. Working as a team	⓪	①	②	③	④
44. Doing experiments	⓪	①	②	③	④
45. Solving problems	⓪	①	②	③	④
46. Sketching ideas	⓪	①	②	③	④
47. Repairing engines	⓪	①	②	③	④
48. Using their creativity	⓪	①	②	③	④
49. Understanding science	⓪	①	②	③	④
50. Reading about inventions	⓪	①	②	③	④
51. Using power tools to fix things	⓪	①	②	③	④
52. Using power tools to build things	⓪	①	②	③	④
53. Writing down their ideas	⓪	①	②	③	④
54. Fixing broken things for other people	⓪	①	②	③	④
55. Writing reports for other engineers	⓪	①	②	③	④
56. Brainstorming different ideas	⓪	①	②	③	④
57. Driving people from place to place	⓪	①	②	③	④
58. Telling other people what they find out	⓪	①	②	③	④

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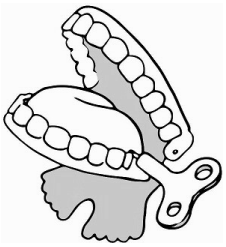
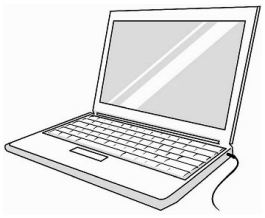
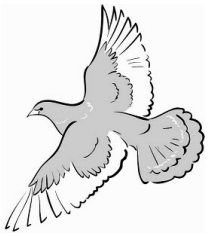
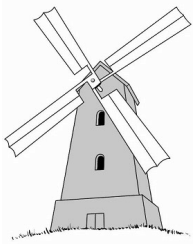
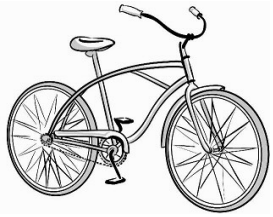
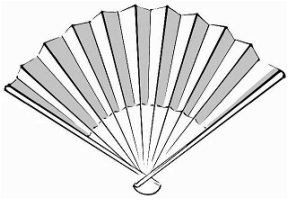
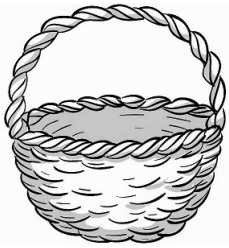
[SERIAL]

53 52 51 50 49 48 47 46 45 44 43 42 41 40 39 38 37 36 35 34 33 32 31 30 29 28 27 26 25 24 23 22 21 20 19 18 17 16 15 14 13 12 11 10 9 8 7 6 5 4 3 2 1

Which of these are examples of technology?
Choose all of the items that you think are technology.

 **Wind-up Toy** Ⓨ Yes Ⓝ No	 **Running Shoes** Ⓨ Yes Ⓝ No	 **Sandals** Ⓨ Yes Ⓝ No	 **Broom** Ⓨ Yes Ⓝ No
 MP3 Player Ⓨ Yes Ⓝ No	 **Volcano** Ⓨ Yes Ⓝ No	 **Piano** Ⓨ Yes Ⓝ No	 **Laptop** Ⓨ Yes Ⓝ No
 **Bird** Ⓨ Yes Ⓝ No	 **Windmill** Ⓨ Yes Ⓝ No	 **Keyboard** Ⓨ Yes Ⓝ No	 **Bonnet** Ⓨ Yes Ⓝ No
 **Bicycle** Ⓨ Yes Ⓝ No	 **Hand-held Fan** Ⓨ Yes Ⓝ No	 **Roller Blades** Ⓨ Yes Ⓝ No	 **Basket** Ⓨ Yes Ⓝ No
 Oak Tree Ⓨ Yes Ⓝ No	 **Dandelion** Ⓨ Yes Ⓝ No	 **Game Controller** Ⓨ Yes Ⓝ No	 **Cell Phone** Ⓨ Yes Ⓝ No