

# NEWS BREAK

**Wednesday's News Break** selects an article from **Tuesday, October 27** of The Seattle Times e-Edition for an in-depth reading of the news. Read the selected article and answer the attached study questions. **Please remember to always preview the content of the article before sharing with your students.**

**STEM: Electrical Engineering** (Main News, **page A10**).

## **Pre-Reading and Vocabulary**

1. Look at the title of this article. What is an engineer? What do you think an electrical engineer does?
2. **Vocabulary: Match the words to the numbered definitions below.**

- A. battery
- B. circuit
- C. conductor
- D. connection
- E. electricity
- F. flow
- G. gap
- H. illuminate
- I. insulator
- J. metallic
- K. receiver
- L. switch

1. a place where two parts or wires meet and touch
2. a device or apparatus that receives electrical signals, waves, or the like, and renders them perceptible to the senses
3. a space between two people or things
4. a material or object that allows electricity or heat to move through it
5. something (a material) that blocks the path of electricity
6. a device that makes and breaks the connection in an electrical circuit
7. the complete path that an electric current travels along
8. to move in a steady and continuous way
9. energy that is carried through wires
10. to supply (something) with light
11. made of metal or containing metal
12. a device that is placed inside a machine (such as a clock, toy, or car) to supply it with electricity

## Comprehension

1. How does electricity travel to the object that needs it to operate?
2. Give one example of a power source mentioned in the article.
3. In an electrical circuit what would a light bulb be?
  - a) Power source
  - b) Receiver
  - c) Wires
4. Adding a switch to a circuit allows you to \_\_\_\_\_ or \_\_\_\_\_ the loop easily. **(Fill in the blanks)**
5. When the wire in the circuit is cut, the electricity cannot make the loop and won't light up the bulb. This is what type of circuit?
  - a) Open Circuit
  - b) Closed Circuit
6. An \_\_\_\_\_ is something that prevents the flow of electricity in a circuit. **(Fill in the blank)**
7. In an electrical circuit what would the wires connect?
8. What does electricity do when conductors are used?
9. Conductors are mostly things that are \_\_\_\_\_. **(Fill in the blank)**
10. Adding an insulator in a circuit will allow the loop to flow with electricity– **true or false?**

## Additional Activities

1. Have students watch the following video about what a day of work is like for an electrical engineer: <https://www.youtube.com/watch?v=ujrEme2UoLM>
2. The field of engineering is very broad. Have students discuss/brainstorm other types of careers in engineering. Then have each student pick a career in engineering that interests them to research. Have students find out what type of work that career involves and what kind of degree, training or education is needed.

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### Answer Key to Vocabulary

- A. 12
- B. 7
- C. 4
- D. 1
- E. 9
- F. 8
- G. 3
- H. 10
- I. 5
- J. 11
- K. 2
- L. 6

### Answer Key to Comprehension Questions

- 1. Through an electrical circuit.
- 2. Battery, Outlet (Answers may vary – only one example necessary)
- 3. b) receiver
- 4. **open or close**
- 5. a) Open Circuit
- 6. insulator
- 7. The wires would connect the receiver (bulb) and power source (battery).
- 8. Electricity flows freely when conductors are used.
- 9. metallic
- 10. False – it will not allow the loop to flow with electricity.