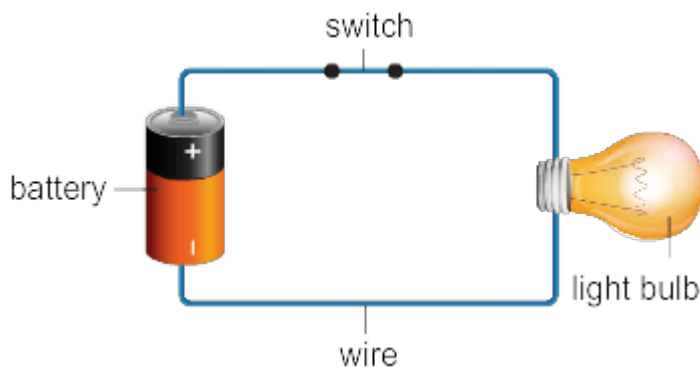


Electromagnets

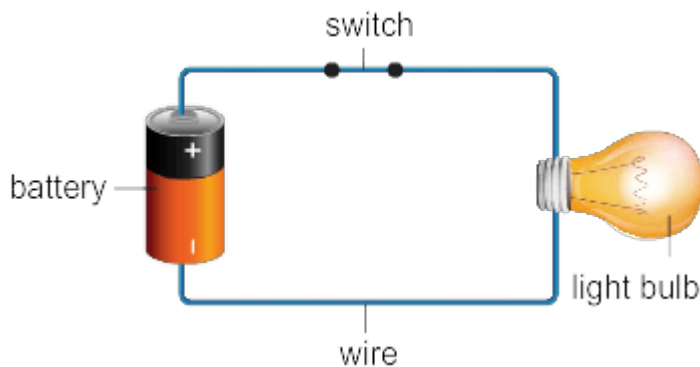
Choose the correct answer.

1. When electricity flows through a wire which of the following appears?



- Gravitational field
- Magnetic field

2. Which of the following will happen to the wire as it is connected to each end of the battery as shown in the image?



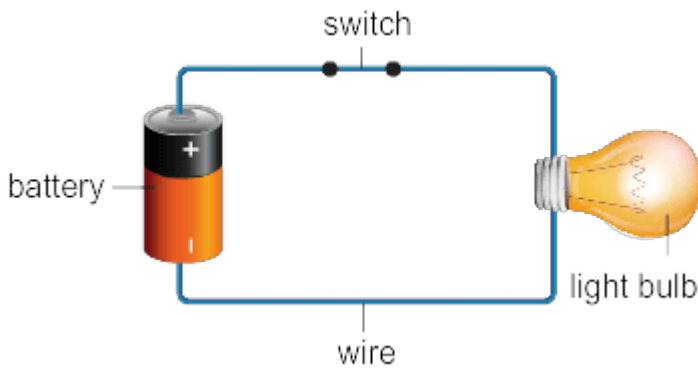
- The wire will break apart.
- The wire will get hot.

3. Which of the following is used to describe a force of nature between particles such as electrons and protons?

- Hurricanes
- Electromagnetism

State whether the following statement is true or false.

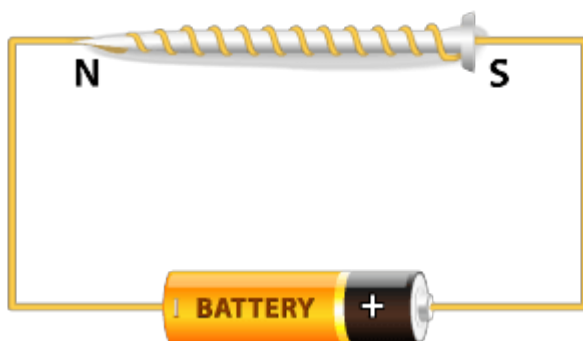
4. A magnetic field can be produced when an electric current flows through a wire.



- True
- False

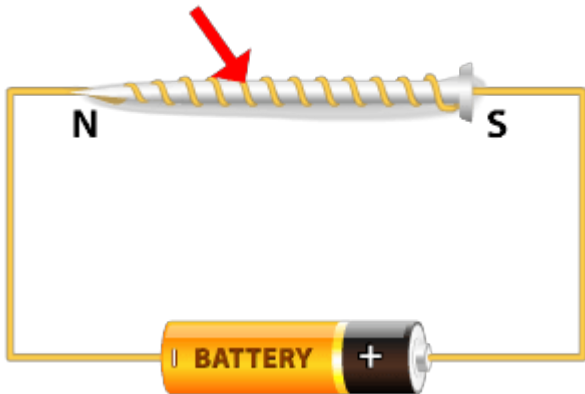
Choose the correct answer.

5. An electromagnet is which of the following?



- Temporary magnet
- Permanent magnet

6. Which of the following is the arrow pointing to in the image of the electromagnet?



- Solenoid
- Android

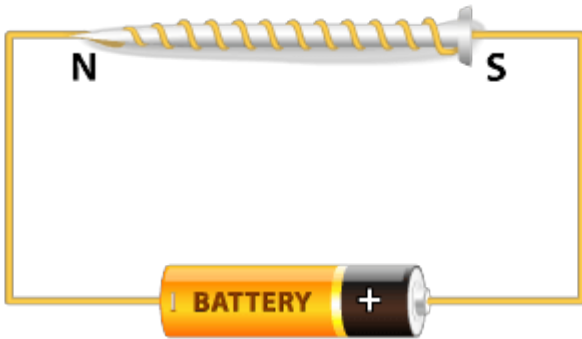
7. Which of the following will result in a stronger electromagnet if all other variables stayed the same?

- 12-volt battery
- 6-volt battery

8. Which of the following will result in a stronger electromagnet if all other variables stayed the same?

- 25 turns of wire on a core
- 50 turns of wire on a core

9. Which of the following is shown in the image?



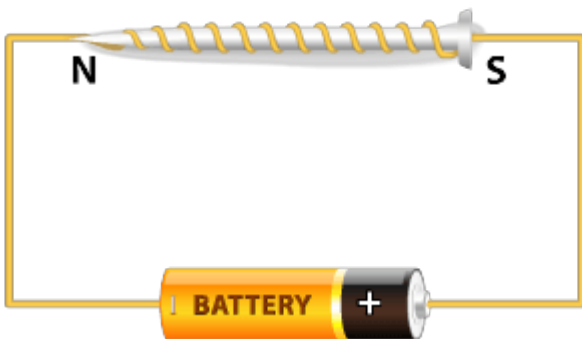
- Electromagnet
- Generator

10. Which of the following is the coil of wire that produces an electromagnet?

- Android
- Solenoid

State whether the following statement is true or false.

11. An electromagnet has North and South poles just like a regular permanent magnet.



- True
- False

Choose the correct answer.

12. The image shown below is which of the following types of magnets?



Horseshoe magnet

- Permanent magnet
- Temporary magnet

13. _____ can be created by a person turning a hand crank or by using a bicycle.

- Electricity
- Matter

14. Which of the following persons built the first electromagnetic motor?

- Hans Oersted
- Joseph Henry

State whether the following statement is true or false.

15. A doorbell uses an electromagnet for its operation.



- True
- False