

ELECTRICITY AND MAGNETISM

Magnetism

TRUE or FALSE

1. Magnetism is the force of attraction or repulsion made by magnetic materials to one another and to other metal materials.

- a) True
- b) False

2. We use magnets to separate plastics from other materials.

- a) True
- b) False

3. Electromagnetism is a force that comes from a process that involves matter and heat.

- a) True
- b) False

MULTIPLE CHOICE

4. This was one of the first scientists in the 18th century who investigated electricity and discovered the relationship between electricity and lightning.

- a) Thomas Edison
- b) Andre-Marie Ampere
- c) Benjamin Franklin
- d) Alexander Graham Bell

5. Hans Christian Oersted discovered the _____ between electricity and magnetism.

- a) conflict
- b) connection
- c) complexity
- d) love

6. He noticed that his compass was affected when a(n) _____ was switched on and off nearby.

- a) light
- b) TV
- c) electric current
- d) fuse box

7. Oersted discovered that, in addition to thermal energy, lightning produces a magnetic force.

- a) True
- b) False

8. If we place a compass next to a _____, the compass needle moves.

- a) TV
- b) magnet
- c) electric circuit
- d) fuse box

9. Ampere discovered that a common particle was producing both electricity and magnetism. What was it?

- a) neutrons
- b) electrons
- c) protons
- d) heat

TRUE or FALSE

10. Bar magnets are temporary magnets. This means they can be switched on and off.

- a) True
- b) False

11. The North Pole is positively charged, and the South Pole is negatively charged.

- a) True
- b) False

12. Bar magnets repel metals such as iron, steel, cobalt and nickel.

- a) True
- b) False

13. What happens when we put two magnets together?

Complete the pictures with the NORTH **(N)** and SOUTH **(S)** poles, and arrows



to show the direction of the magnetic force.

Attract

Repel
