Blooket | Question Set - Answer Key

Name

Date

Class

Exercise: Magnetism

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1. What is a magnetic field?

a) The process by which a material becomes magnetized

b) The invisible force that surrounds a magnet ✓

c) The attraction between two non-magnetic materials

d) The process of demagnetizing a magnet

2. Which of the following is a type of permanent magnet?

a) Electromagnet

b) Induced magnet

c) Bar magnet ✓

d) Magnetic domain

3. What happens when two opposite magnetic poles are brought together?

a) They repel each other

b) They align with the magnetic field

c) They attract each other ✓

d) They demagnetize

4. Magnetic induction occurs when:

a) Magnetic materials lose their magnetism

b) Magnetic domains scatter randomly

c) A material becomes magnetized by an external magnetic field ✓

d) Two magnets are hammered

5. Which method can be used to demagnetize a magnet?

a) Rubbing it with another magnet

b) Heating the magnet ✓

c) Increasing electric current through it

d) Wrapping it in an iron coil

6. What is a common use of an electromagnet?

a) MRI machines ✓

b) Wooden bells

c) Plastic speakers

d) Permanent magnets

7.

In an electric bell, what makes the hammer strike the bell?

a) Heating

b) Magnetic domains aligning

c) Electromagnet attracting the iron armature ✔

d) Lorentz force acting on the contact screw

8. Which of the following describes Lorentz Force?

a) The force between two magnetic poles

b) The force experienced by a moving charge in a magnetic and electric field ✔

c) The attraction between two ferromagnetic materials

d) The repulsion between opposite charges

9. The direction of a magnetic field around a current-carrying wire can be detected by:

a) Using the left-hand rule

b) Plotting compasses or iron filings ✔

c) Hammering the wire

d) Heating the wire

10. What happens when a magnet is hammered?

a) It becomes stronger

b) It aligns with the Earth's magnetic field

c) Its magnetic field becomes permanent

d) Magnetic domains scatter and lose alignment ✔

11. How does heating a magnet demagnitze it?

_____

12. Why does electromagnet use iron instead of steel magnet?

_____

When a magnet is heated, the heat will increase the vibration of atoms in a magnet. These vibrations can break the magnetic alignments which means that the magnetic domains will be scattered and have different directions.

Iron has a higher magnetic permeability than steel, meaning it can be magnetized and demagnetized more easily and strongly when a current flows through the coil.