

Magnetism Practice (Demo Version)

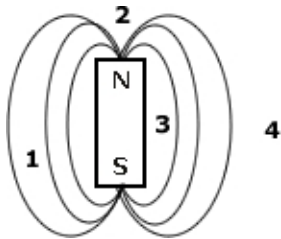
Read each question carefully.

1) Which of the following has the greatest effect on the force between two magnets?

- A) the amount of time the magnets are near each other
 - B) the color difference between the magnets
 - C) the amount of light shining on the magnets
 - D) the position of the magnets' poles
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2) The picture below shows a bar magnet's magnetic field.

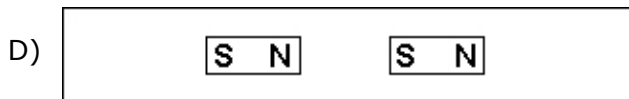
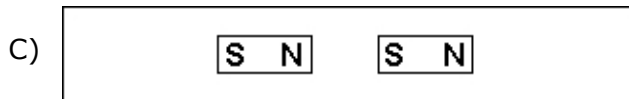
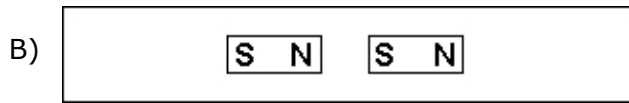
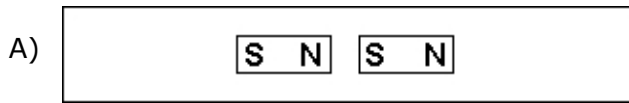
At which point is the magnetic field strongest?



- A) 1
 - B) 2
 - C) 3
 - D) 4
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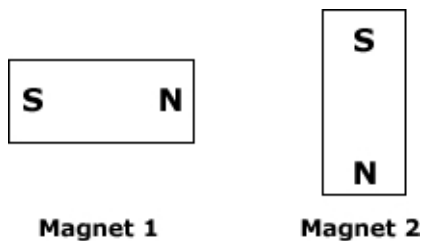
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3) Which arrangement will lead to the strongest attraction between the magnets?



4) The picture below shows two magnets.

What will happen as Magnet 1 is pushed toward Magnet 2?



- A) Magnet 2 will begin to spin and move in the opposite direction of Magnet 1.
- B) Magnet 2 will change its poles so that the N pole is on the top and the S pole is on the bottom.
- C) Magnet 2 will rotate clockwise so that its N pole lines up with the N pole on Magnet 1.
- D) Magnet 2 will rotate counterclockwise so that its S pole lines up with the N pole on Magnet 1.

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- 5) Which statement is true?
- A) When an electric current travels through a wire, the wire becomes a magnet.
 - B) When an electric current passes through a magnetic field, the magnetic field exerts a force on the current.
 - C) When a magnet is held near an electric current, it loses its magnetic properties.
 - D) When a magnet is placed near a wire conducting an electric current, the electric current will leave the wire and enter the magnet.
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- 6) Which of the following best describes the relationship between magnetism and electricity?
- A) When a circuit is closed, it repels any magnets that are placed nearby.
 - B) When magnets are rubbed against a wire, electricity begins flowing through the wire.
 - C) When wire is wrapped around a magnet, electricity stops flowing through the wire.
 - D) When an electric current flows through a wire, a magnetic field forms around the wire.
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- 7) Which of the following best describes the relationship between magnetism and electricity?
- A) An electric current can create a magnetic field.
 - B) A magnetic field can create an electric current.
 - C) An electric current can create a magnetic field, and a magnetic field can create an electric current.
 - D) Although electric currents and magnetic fields are interrelated, neither can create the other.
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- 8) Which statement is true?
- A) In an electromagnet, the magnetic field flows alongside the electric current.
 - B) In an electromagnet, the magnetic field flows within the electric current.
 - C) In an electromagnet, the magnetic field forms circles around the electric current.
 - D) In an electromagnet, the magnetic field zigzags around the electric current.
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