

Answer completely in the space provided. You may do any work on the back.

1. The source of all magnetism is
2. **True or False:** If you break a bar magnet in half, one half will be the north pole and the other half will be the south pole.
3. Seven paper clips dangle from the north pole of a magnet. Is the bottom of the last paper clip a north or a south pole?
4. What is a magnetic domain?
5. Sketch a bar magnet. Include and label: magnetic domains, magnetic poles, and magnetic field lines.
6. Where on a magnet is the magnetic force the strongest?
7. The reason a magnet can attract an unmagnetized nail is that the nail becomes temporarily \_\_\_\_\_ in the magnet's magnetic field.
8. What type of field acts in a circle around a current carrying wire?
9. In order to increase the strength of an electromagnet, you can \_\_\_\_\_ the number of loops of wire around the iron core.
10. What three things do you need to make an electromagnet?
11. An electric \_\_\_\_\_ converts mechanical energy into electrical energy.
12. A(n) \_\_\_\_\_ is used to reduce the voltage of the electricity coming into your home from the power lines.

Circle the questions you answered incorrectly. Remove this strip and turn in to your teacher.

C10

Magnetism  
1            6  
2            7  
3  
4  
5

Electromagnetism  
8  
9  
10  
11  
12

Name:

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Electromagnetism

- |    |
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