

Name: \_\_\_\_\_

Date: \_\_\_\_\_



# GENIUSCHALLENGE

## HEAT: TRANSFER OF THERMAL ENERGY

1. \_\_\_\_\_ is the measure of the average kinetic energy of the particles of a substance.

2. Heat is a form of energy transfer from a \_\_\_\_\_ location to a \_\_\_\_\_ location.

3. Heating by direct contact between particles is called \_\_\_\_\_.

4. The type of thermal energy transfer that heats our homes is called \_\_\_\_\_.

5. Why would it be incorrect to say that heat rises?

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6. Explain how a metal chair can get too hot to sit on when it has been left out in direct sunlight.

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7. What factors affect the rate of thermal energy transfer? \_\_\_\_\_

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8. Why does it take more energy to heat a bathtub full of water than a pan of water to the same temperature?

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9. Why is water considered a good insulator? \_\_\_\_\_

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10. How does a jacket keep you warm?

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