

**SECTIONS: 4A,B,C,D,E**

<b>DATE</b>	<b>HOMEWORK</b>	<b>PARENT SIGNATURE</b>
Monday Science	→ Complete the study guide → <b>Test tomorrow--Open notebook test</b>	
Tuesday Science	No Homework	
Wednesday Science	No Homework	
Thursday Social Studies	No Homework	
Friday Social Studies	No Homework Enjoy the Break!!! See you in 2019!	

**I.A.N HW**

**NO IAN HOMEWORK UNTIL AFTER THE HOLIDAYS.**

**VOCABULARY**

**Science**

- **Light (radiant) energy:** energy that travels in electromagnetic waves and may travel in space
- **Heat (thermal) energy:** energy produced from the movement of molecules
- **Sound energy:** energy produced by sound vibrations
- **Electrical energy (electricity):** energy produced from the flow of an electric current through a conductor
- **Mechanical energy:** energy gained by the physical movement in position of an object
- **Kinetic energy:** energy in motion
- **Potential energy:** energy at rest or will be used later
- **Crest:** the highest point on a wave
- **Trough:** the lowest point on a wave
- **Wavelength:** the distance between one crest and another crest
- **Frequency:** the number of waves that pass a particular point in a given amount of time
- **Pitch:** how high or low a sound seems

**Reminders**

- **Parents:** Don't forget to initial your child's HW Cover Sheet every night.
- **Science Energy Test Tuesday, December 18th**
- **OPEN NOTEBOOK TEST**

## Energy Study Guide

**Directions:** Fill in the blanks. Use the notes in your notebook.

1. Energy makes things happen.  
Energy is the ability to do \_\_\_\_\_.
2. Light is a form of \_\_\_\_\_.
3. Light travels in a \_\_\_\_\_ line until it strikes an object or travels from one type of material to another.
4. What happens to light waves when they strike an object?

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

5. Light bounces off or is \_\_\_\_\_ from some kinds of opaque objects.
6. Light bends or \_\_\_\_\_ as it passes from one medium (form of matter: solid, liquid, gas) to another.
7. Heat (thermal energy) is transferred from one substance to another, from the substance with the \_\_\_\_\_ temperature to the substance with the \_\_\_\_\_ temperature.
8. Heat is transferred from one object to another in three ways:
  - \_\_\_\_\_: the transfer of thermal energy through direct contact.
  - \_\_\_\_\_: the transfer of thermal energy through a liquid or a gas.
  - \_\_\_\_\_: the transfer of thermal energy through electromagnetic waves.

What kind of heat transfer is this?

- boiling water in a pot \_\_\_\_\_
  - two eggs cooking in a pan \_\_\_\_\_
  - a microwave heating up food \_\_\_\_\_
  - your hands touching a mug of hot chocolate \_\_\_\_\_
  - laying out on the beach to get sun \_\_\_\_\_
9. Sound waves travel through a \_\_\_\_\_. The can't move through a \_\_\_\_\_.
  10. What are the 3 mediums? \_\_\_\_\_

11. On the lines below show the speed of sound waves from fastest to slowest

\_\_\_\_\_

12. \_\_\_\_\_ energy is the energy of motion

13. \_\_\_\_\_ energy is stored energy

14. Sound is produced from \_\_\_\_\_.

15. Label the following wave with the following: trough, crest, and wavelength

