**LIGHT AND HEAT STUDY GUIDE**



 Use the picture above to answer questions 1-3

1. If you were to sit in the chairs near the fire pit, you would feel the warmth of the fire, why is this? What type of heat transfer is occurring?
2. If you were roasting a marshmallow above the fire what type of heat transfer is occurring as the marshmallow cooks? (**HINT**: your marshmallow is in the **AIR**)
3. If while roasting marshmallows, you decided to use a metal stick instead of wood and you burned yourself, what type of heat transfer occured?
4. What is a conductor? Give 3 examples of conductors.
5. What is an insulator? Give 3 examples of insulators.
6. Why does Starbucks use paper cups for their hot coffee and not metal cups?
7. Explain what happens to a pot of water as it begins to boil.
8. Explain the changes that happen to an ice cube when heat is added to it.
9. Which travels faster sound or light?
10. When does heat transfer stop?
11. Why does an apple appear red?
12. As you go from left to right on the electromagnetic spectrum, what happens to the wavelengths? Frequency? Energy?
13. How does the Suns energy get to Earth?
14. What is reflection? Give an example of reflection.
15. What is refraction? Give an example of refraction.
16. What is absorption? Give an example of absorption.



1. Which wave above has the longest wavelength? Shortest wavelength?
2. Describe how a rainbow forms.