

Bill Nye Heat Video worksheet


1. Heat is _____ and can do _____.
2. What are the three ways heat is transferred through the universe?

3. How is heat transferred from the sun? _____
4. What kind of heat transfer goes on when warm air rises? _____
5. What is it called when heat is transferred directly from one object to another? _____
6. Predict: Which sugar cube will be dropped into the water first? _____
Why? _____

Were you correct in your reasoning? Make any corrections here: _____

7. Do cold things have heat? _____ Why? _____

Were you correct in your reasoning? Make any corrections here: _____

8. Summarize: More _____ = _____
Recall: Gases and liquids are fluids. They flow and take the shape of their containers.
9. When a fluid becomes hot, it _____ and becomes _____ than the cool fluid on top. As the cooler fluid moves _____, the warmer fluid _____. Heat transfer by these currents is called _____.
10. Natural convection example: The _____ warms the _____ and it heats the air right above it. The air molecules move _____ and get (closer together/farther apart). The cool air moves _____ and pushes the warm air _____.
11. Even cold things _____.
12. What kind of transfer happens in a vacuum? _____
13. Heat radiation is a _____.
-  14. The hotter something is _____
15. Why is the boy kneeling on a pad in the snow cave? _____
16. Why is air a poor conductor? _____
17. What kind of heat transfer requires object to touch each other? _____
18. **Your turn:** In the video you saw a “lava lamp”. On the back, explain how a lava lamp works. (You will need to discuss all three kinds of heat transfer to get the whole story!)