

## **Nova: Making Stuff Colder Viewing Questions**

Answer the following questions as you watch...your answers can be brief.

1. What is heat?
2. What is temperature?
3. What is cold?
4. What direction does heat travel?
5. By what percentage does hypothermia therapy increase that chance of surviving a heart attack?
6. What is the human body's natural response to getting cold?
7. What animal does the video discuss that can survive being completely frozen?
8. What is the longest period of time a heart, on ice, can last before being transplanted?
9. What term do we use for the frozen earth found underground in Alaska?

Chemistry

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

10. At what temperature does Helium liquify?
11. What do we call a substance that conducts electricity without resistance?
12. Who was D-Wave's first buyer for a quantum computer?
13. What name do we give billionths of a Kelvin?
14. What type of atoms do the engineers at MIT use to reach super-cold temperatures?
15. What do we call the new state of matter that exists at billionths of a degree Kelvin?
16. How does the study of the super-cold systems help us understand the super-hot systems that existed during the Big Bang?
17. Why is it that we can never reach absolute zero?