

**THE MECHANICAL UNIVERSE**  
**Video 48 - Low Temperatures**

**Name:** \_\_\_\_\_  
**Class:** \_\_\_\_\_

1. Is it more difficult to heat things up or make them cold?
2. What are the two main elements that make up air?
3. What two variables determine the states of matter?
4. In which state do molecules not adhere to each other?
5. The use of what common gas led to a cooling breakthrough in the 19<sup>th</sup> century?
6. What principle lies at the heart of the liquification process?
7. Who discovered the Law of Conservation of Energy?
8. What material did Lindy's cooling system utilize?
9. Which gas is the most difficult to liquefy?
10. Who was the first person to liquefy hydrogen?
11. What gas has the lowest liquification temperature of all?
12. At what temperature does helium liquefy?