

**THE MECHANICAL UNIVERSE**  
**Video 20 - Torques and Gyroscopes**

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

1. What 3 quantities never change?
2. What is Newton's Third Law really about?
3. When was the wheel probably invented?
4. Define torque:
5. What is meant by a wheel "precessing?"
6. Explain how a gyroscope can be used to aid navigation?
7. What is the best gyroscope on earth?
8. What is an equinox?
9. In which direction do the equinoxes drift?
10. How long does it take for the earth to precess once?