

Name: _____ Date: _____ Period: _____

Answer each of the following questions in complete sentences.

1. What is the name of the property of objects to maintain their states of motion?

2. A space probe may be carried by a rocket into outer space. What keeps the probe going after the rocket no longer pushes it?

3. Consider a ball at rest in the middle of a toy wagon. When the wagon is pulled forward, the ball rolls against the back of the wagon. Interpret this observation in terms of Newton's first law.

4. Why do you lurch forward in a bus that suddenly slows? Why do you lurch backward when it picks up speed? What law applies here?

5. Push a shopping cart and it moves. When you stop pushing, it comes to rest. Does this violate Newton's law of inertia? Defend your answer.
