1. Summarize the Principle of Inertia and Newton’s First Law of motion.
2. Apply the principle of inertia and Newton's First Law to predict the outcome of the following situations.

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| Situation | Diagram | Prediction | Explanation |
| A. You quickly pull a towel out from under a glass of water. |  | The glass of water will... |  |
| B. You are a passenger in a car that makes a sharp right turn. |  | You will feel... |  |
| C. A moving snowmobiler throws a ball straight up. The snowmobiler keeps moving at constant velocity. |  | Will the ball return to the snowmobiler? |  |
| D. A moving snowmobiler throws a ball straight up. The snowmobiler then stops. |  | Will the ball return to the snowmobiler? |  |
| E. A coin rests on top of a playing card. You quickly flick away the card. |  | The coin will... |  |
| F. An object sits on top of a moving skateboard that hits a wall. |  | The object will... |  |