

Station G—Gravity

1. Hold your arm out straight to the side of your body with your palm up. Place a textbook on your palm. Hold the textbook as motionless as possible for 1 minute.

Do you feel a force acting on the textbook? _____

Describe this force. _____

What keeps the textbook from falling to the floor? _____

2. Draw a diagram in the space below of your arm and the textbook. Identify, using arrows (vectors), the direction of each of the forces acting on the object(s).

3. Now place the textbook on a table.

Describe the force that keeps the textbook from falling. _____

4. Draw a diagram in the space below of the table and the textbook. Identify, using arrows (vectors), the direction of each of the forces acting on the object(s).