**General Physical Science – Forces Study Guide**

Name\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Period\_\_\_\_\_\_\_\_\_\_

|  |  |
| --- | --- |
| **Force** |  |

|  |  |
| --- | --- |
| **Balanced** |  |
| **Unbalanced** |  |

|  |  |
| --- | --- |
| **Friction** |  |
| **Sliding friction** |  |
| **Rolling friction** |  |
| **Fluid friction** |  |
| **Static friction** |  |

|  |  |
| --- | --- |
| **Gravity** |  |

|  |
| --- |
| **20 N**  http://www.nydailyherald.com/images/home_apple.png  **100 N**  Net Force:  Direction: |

|  |  |
| --- | --- |
| **Air Resistance** |  |

|  |  |
| --- | --- |
| **Projectile Motion** |  |

|  |  |
| --- | --- |
| **Inertia** |  |

|  |  |
| --- | --- |
| **Terminal Velocity** |  |

## Show your work!!!!!!!!!!!!!!!!

1. A boy pulls a wagon with a force of 10 N right as another boy pushes it with a force of 3 N left. What is the net force?
2. Mr. Smith and his wife were trying to move their new chair. Mr. Smith pulls with a force of 30 N while Mrs. Smith pushes with a force of 35 N in the same direction. What is the net force?
3. The classes are playing tug of war. Ms. Perry’s homeroom pulls with a force of 50 N. Mr. Turner’s homeroom pulls with a force of 15 N in the opposite direction. What is the net force? And who won?
4. What is a balanced force?
5. What is an unbalanced force?
6. Draw a picture below that shows an example of a balanced force of a person skydiving. Show the forces acting on the object. In a separate picture show what would happen to the person if the forces became unbalanced.
7. **Horizontal: Net force \_\_\_\_\_\_\_\_\_\_\_ Direction \_\_\_\_\_\_\_\_\_\_\_\_  
   Vertical: Net force \_\_\_\_\_\_\_\_\_\_\_ Direction \_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**2 N**

**6 N**

1. **Horizontal: Net force \_\_\_\_\_\_\_\_\_\_\_ Direction \_\_\_\_\_\_\_\_\_\_\_\_  
   Vertical: Net force \_\_\_\_\_\_\_\_\_\_\_ Direction \_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**1 N**

**1 N**

**6 N**

**6 N**

1. **Horizontal: Net force \_\_\_\_\_\_\_\_\_\_\_ Direction \_\_\_\_\_\_\_\_\_\_\_\_  
   Vertical: Net force \_\_\_\_\_\_\_\_\_\_\_ Direction \_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**6 N**

**1 N**

**1 N**

**12 N**

1. **Horizontal: Net force \_\_\_\_\_\_\_\_\_\_\_ Direction \_\_\_\_\_\_\_\_\_\_\_\_  
   Vertical: Net force \_\_\_\_\_\_\_\_\_\_\_ Direction \_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**1 N**

**3 N**

**8 N**

**6 N**

1. **Horizontal: Net force \_\_\_\_\_\_\_\_\_\_\_ Direction \_\_\_\_\_\_\_\_\_\_\_\_  
   Vertical: Net force \_\_\_\_\_\_\_\_\_\_\_ Direction \_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**5 N**

**2 N**

**2 N**

**2 N**

**Horizontal: Net force \_\_\_\_\_\_\_\_\_\_\_ Direction \_\_\_\_\_\_\_\_\_\_\_\_  
Vertical: Net force \_\_\_\_\_\_\_\_\_\_\_ Direction \_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**7 N**

**2 N**