## Gears Pre-Quiz Answer Key

1. **Gears affect:**
   1. **Speed of rotation only**
   2. **Ability to pull or lift only**
   3. **Work done**
   4. **Both speed and ability to lift or pull**
2. **For a truck that needs to pull a lot of weight:**
   1. **Use a high gear ratio (wheels will spin slowly)**
   2. **Use a low gear ratio (wheels will spin quickly)**
   3. **The gear ratio doesn't matter**
   4. **No gears should be used at all**
3. **Using a simple machine affects the total amount of work done.**
   1. **true**
   2. **false**
4. **Gears are useful.**
   1. **true**
   2. **false**
5. **Gears are used in engineering designs to: (select all that apply)**
   1. **help lift a heavy load**
   2. **make things look nice while spinning**
   3. **make wheels spin faster**
   4. **measure speed**