

Gears Pre-Quiz **Answer Key**

1. Gears affect:
 - a. Speed of rotation only
 - b. Ability to pull or lift only
 - c. Work done
 - d. Both speed and ability to lift or pull**

2. For a truck that needs to pull a lot of weight:
 - a. Use a high gear ratio (wheels will spin slowly)**
 - b. Use a low gear ratio (wheels will spin quickly)
 - c. The gear ratio doesn't matter
 - d. No gears should be used at all

3. Using a simple machine affects the total amount of work done.
 - a. true
 - b. false**

4. Gears are useful.
 - a. true**
 - b. false

5. Gears are used in engineering designs to: (select all that apply)
 - a. help lift a heavy load**
 - b. make things look nice while spinning
 - c. make wheels spin faster**
 - d. measure speed