Electric Motors Post-Quiz Answer Key

1. What is an electric motor?

A motor is an electrical machine used to create motion. The device converts electricity (electrical energy) into motion (mechanical energy). Typically performed by rotating an object.

2. Name three applications in which electric motors are used.

Moving a tape in a tape drive player. Running the motor in a vacuum cleaner. Throwing tennis balls by a ball thrower.

3. In the activity, why were you not able to calculate the rotations correctly in some cases?

Gears don't mesh perfectly in general and that causes errors. Also, positioning the wheel accurately is difficult and if not perfect could lead to errors. All these add up and cause differences between mathematical calculations (assuming calculations are correct!) and actual measurements.