Sumobot Challenge Post-Quiz Answer Key

1. What type of gear ratio did you use for your Sumobot?
   How did that affect the fight?
   
   If a large gear ratio was used (big gear turning small gear), the robot was faster but sacrificed power.
   
   If a small gear ratio was used (small gear turning big gear), the robot had a lot of power while sacrificing speed.
   
   If the gear ratio used was close to 1 (similar-sized gears turning each other), the robot maintained a balance of both power and speed.

2. How did you change the design of your robot and/or your program to help you complete the task?

   Several answers are possible, such as:
   
   Changing gear ratio (power vs. speed)
   
   Designing different structures to help fight the other robot
   
   Designing a program so the robot moves directly towards the robot opponent