Sumobot Challenge Pre-Quiz Answer Key

1. What must you keep in mind when building a robot to fight another robot by trying to push it out of a ring?

Example possible answers:

- Robot structure, that is, to scoop the other robot, pushing mechanism, etc.
- Robot weight
- Robot gear ratio: power vs. speed

2. How can you use gears to your advantage in the competition?

Example possible answers:

- Use a low gear ratio (small gear turning a big gear) and focus on a powerful attack.
- Use a high gear ratio (large gear turning a small gear) and focus on a speedy attack.
- Use a medium gear ratio and balance between both power and speed.