

Maze Challenge Pre-Quiz **Answer Key**

1. What is a design challenge?

A design challenge starts with a problem you want to solve. You think through the challenge logically and plan a design solution. Using suitable and available materials and following all the steps in the engineering design process, you create, test and evaluate your best solution to the challenge. As necessary, you iterate (repeat) this process until a successful design is achieved.

2. How do you program a robot to move 2 feet forward in a straight line?

Calculate the distance that the robot moves forward for one motor rotation. Let's say, it moves X inches with one motor rotation. Then divide 2 feet, which is 24 inches by X , that is, calculate $24/X$ and program the motor to rotate $24/X$.