**Worksheet: Turning Challenge**

**CHALLENGE 1:** Your robot is a baseball player. Program the robot to go around the baseball diamond.

B

C

**What should you do?**

* Read pseudocode for the program
* Program the code
* Test it out

*Pseudocodeis like the method in a Science experiment.* It uses english to describe the detailed steps that your robot should perform. The pseudocode for this challenge is below.

Step 1: Move forward 30 cm

Step 2: Turn left 90 degrees

Step 3: Move forward 30 cm

Step 4: Turn left 90 degrees

Step 5: Move forward 30 cm

Step 6: Turn left 90 degrees

Step 7: Move forward 30 cm

Pseudocode gives you a good start towards writing the code for your program.

Did your code work?

Did you use port view?

**CHALLENGE 2:** Your robot is a baseball player.

Start and End position

First Base

B

C

Second Base

The robot has to run from one base to the next.

Oh no! He’s going to be tagged out.

So he has to turn around and run back to the previous base!

**What should you do?**

* Write some pseudocode for the program
* Program the code
* Test it out

**Pseudocode:**

**What type of turn did you use? Make sure you test both PIVOT and SPIN turns.**

**What type of turn gets you back to the base? (As close as possible)**