

(20 pts) Approx. 2 days

Moving into our third part of the unit, we finally hit some of the more technical parts that require some careful reading. As you start this work, take the time to read the handout carefully. It will introduce Locations, Grids, and Actors. Each of these is essential to understand thoroughly if you want to use Gridworld to make a 2D game next quarter! Takes some good notes and dig through the challenge!

1. Watch this part’s presentations on Gridworld Part 3 and start a page of notes. Add to those notes as you read the Part 3 Activity Handout. Make sure that your notes include details on the Location class, the Grid interface, and the Actor class. A good understanding of these three things will be the key to a successful Gridworld game later on!
2. Get the *Part 3: Gridworld Classes & Intrefaces* handout. Read through the text and follow the steps as they are described. The goal is to understand what the Location, Grid, and Actor classes and interfaces are designed to do.
3. Answer the **Do You Know Sets 3,4,5,6** questions in your engineering notebook (add your answers to your notes) as you work through the different explorations and mini activities.
4. Work with a partner (if you’d like) to complete the Gridworld Challenge 6: Jumper. This challenge is slightly more complex than previous challenges, so a partner can make the job easier and more fun.

This part explores a good problem-solving process (similar to our engineering design process, but for computer science specifically). As you complete the Gridworld Challenge 6: Jumper, try to work through these steps:

- a. Discuss & Clarify the problem (*define the problem*)
- b. Design your solution (*brainstorm & pick a solution*)
- c. Code (*prototype*)
- d. Test (*test & evaluate*)

Part 3: Tasks	4 points	3-2 points	1-0 points
 Gridworld Notes	+ You took a full page of notes (for all of Part 3) on Gridworld Classes & Interfaces	- Less than a full page of notes on Gridworld	- Very brief or no notes in your notebook
 Part 3 Activity	+ You read through and completed the Part 3: Gridworld Classes & Interfaces”	- You completed some of the activity	- You did not complete the activity
 Do You Know Sets 3-6	+ You answered all “Do You Know” questions in your engineering notebook	- You answered most of the questions	- You did not answer the questions
	8-5 points	4-2 points	1-0 points
 Gridworld Jumper Challenge	+ Mr. Benshoofgot to see your complete Jumper Challenge!	- Your Jumper does not work as intended	- You did not do the Jumper Challenge

