

Answer the following using the available GridWorld QuickReference/API information.

1. **FULLY** describe the purpose of the following methods found in the `Bug` class (or inherited from parent classes). Be sure to show the relationship between any methods that call the other methods. Also, be sure to **FULLY** explain what is returned by those methods that do not have a `void` return type.

`act`

`turn`

`move`

`canMove`

2. Do the same for the following methods used in the `Critter` class.

`act`

`getActors`

`processActors`

`getMoveLocations`

`selectMoveLocations`

`makeMove`

3. If you were to create a class in which the object acts like a `Critter` except that it only eats actors that are in front of it (NORTH, NORTHEAST, & NORTHWEST), which method(s) of the `Critter` class would you override? Also, **FULLY** explain what you would do in that method(s). (You cannot override the `act` method though.) ANSWER ON THE BACK OF THIS PAPER.

4. If you were to create a class in which the object acts like a `Critter` except that it only moves randomly to an unoccupied location to its left or right instead of to any adjacent location, which method(s) of the `Critter` class would you override? Also, **FULLY** explain what you would do in that method(s). (You cannot override the `act` method though.) ANSWER ON THE BACK OF THIS PAPER.