

# Greenfoot Ecosystems Cheat Sheet

## Greenfoot Help

Method	Purpose	Example	Explanation
<pre>super(int x, int y, int z);</pre>	This is a java method which allows access to methods from the specific objects' superclass.	<pre>super(600, 400, 1);</pre> <p>written in a World object i.e. MyFirstWorld.</p>	This sets a world with a grid of 600 by 400 cells, where each cell contains 1 by 1 pixels.
<pre>"NameOfClass" ( name of Object) = new "NameOfClass" () ;</pre>	Creates a new object within the given class.	<pre>MainCharacter frog = new MainCharacter( );</pre>	This creates a new object called frog in the class MainCharacter.
<pre>addObject(Actor object, int x, int y);</pre>	This allows you to place an object in the specific World.	<pre>addObject(frog , 1, 1);</pre> <p>written in a World Object i.e. MyFirstWorld.</p>	This places a previously created object named frog in cell (1,1).
<pre>setRotation(int rotation);</pre>	Sets the rotation of an object.	<pre>setRotation(90 );</pre> <p>written in an Actor object.</p>	This sets the rotation of an object to 90 degrees i.e. facing downwards. 0 = right, 90 = down, 180 = left, 270 = up.

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<code>move (int distance);</code>	This makes an object move a given distance (in cell size) in the direction it is facing.	<code>move (1);</code>  written in an Actor object.	This makes an Actor object move a distance of 1 cell in the direction it is facing.
<code>isTouching (Class cls);</code>	Checks whether this actor is touching any other objects of the given class.	<code>isTouching (Collectables.class);</code>  written in MainCharacter object.	Checks if the MainCharacter is touching an object of the class Collectable.
<code>removeTouching (Class cls);</code>	Removes anything in a given class which is touching the object this method is written in.	<code>removeTouching (Collectables.class);</code>  written in MainCharacter object.	Removes from the world any objects in the Collectables Class that the MainCharacter touches.
<code>Greenfoot.getRandomNumber (int limit)</code>	Return a random number between 0 (inclusive) and limit (exclusive).	<code>Greenfoot.getRandomNumber (4);</code>	Returns a random number between 0 and 3. Does not include the number entered i.e. 4!

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## Key Words

**Class**  
**Inheritance**  
**Method**

**Object**  
**Compile**  
**Documentation**

**Class** - A Class is like an object constructor, or a "blueprint" for creating objects.

**Object** - An object is an instance of a class.

**Inheritance** - Objects are often very similar. They share common logic. But they're not entirely the same. Inheritance enables new objects to take on the properties of existing objects. A class that is used as the basis for inheritance is called a superclass, base class or parent class. A class that inherits from a superclass is called a subclass, derived class or child class.

**Compile** - convert (a program) into a machine-code or lower-level form in which the program can be executed.

**Method** - A method is like an instruction that can be called on the class or object.

**Documentation** - information that describes the product to its users. It consists of the product technical manuals and online information.