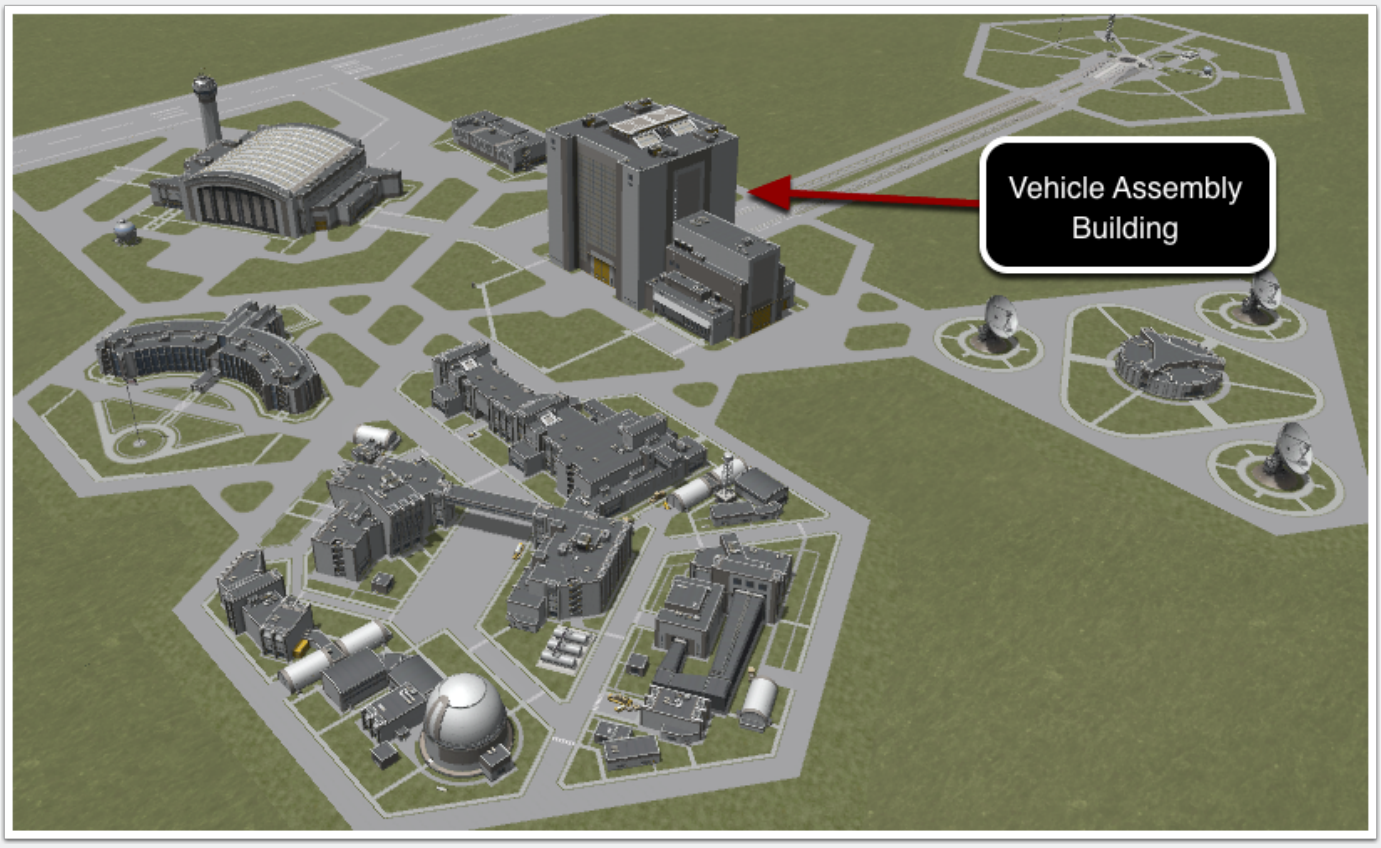
Building Your First Rocket

Building a basic rocket in Kerbal Space Program. Begin by starting a new game in "Sandbox" mode.

Start by heading to the Vehicle Assembly Building



Begin by choosing a Command Pod to start your rocket assembly.

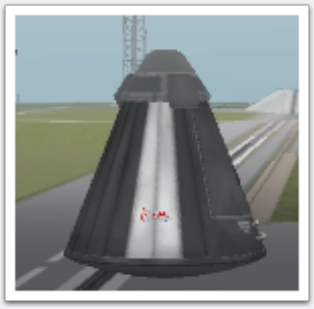
The Command Pod MK1 is a great place to start. It holds a single Kerbonaut.

Place the Command Pod Mk1 in the center of the screen and left click. You can now start adding additional parts.

A parachute will be important to the survival of your Kerbal.

Try adding an Mk16 Parachute (from the Utility Menu) to the top of your command pod.

Place the parachute on the top of your rocket. You're on your way!



Next you'll want a way to separate your command pod from your engine.

Let's add a TR-18A Stack Decoupler to the bottom of your command module. You can find it on the "Structural" Menu.

Place the decoupler on the bottom of the command module.

Now let's find ourselves some propulsion.

A FL-T400 Fuel Tank should do the trick.

Let's actually try adding two of them, one underneath the other.

Next we'll need a liquid rocket engine to burn the fuel.

Let's choose an LV-T45 Liquid Fuel Engine. It has additional thrust vectoring to help control our rocket, which may come in helpful as we build a simple rocket without some of the more advanced control features available to us as we become more proficient.

Place the liquid fuel engine on the bottom of our assembly.

We now have a functioning rocket. It's not enough yet to get us into orbit, but it's a great place to play around.

Let's add another (initial) stage of propulsion. Solid Rocket Boosters should do the trick.

First we'll need to add some decouplers so we can jettison our used SRBs. A couple of TT-38K Radial Decouplers should do the trick. Let's add 3 of them all at once by choosing "Symmetry Mode" from the bottom of our selection window.

Place our radial decouplers along the sides of our liquid fuel engine.

RT-10 Solid Fuel Boosters should do the trick.

No separate engine required!

Add the SRBs to the decouplers in symmetry mode as well.

Not very aerodynamic, but it'll work for our purposes.

Note the staging diagram at the bottom right of your screen.

Each stage is shown from bottom up. We move from one stage to the next by pressing the spacebar after launch.

This basic rocket should allow you to do quite a bit as you get started!