**Phase 1: Alien Species Creation**

You will choose one of the following planet types as your baseline. Research the planet’s characteristics paying close attention to atmosphere, chemical makeup, land features, temperature, gravitation, and any other factors that would impact life on the planet. Your alien does not have to follow the rules of life as WE know it, but it must make logical sense. If you’re having trouble coming up with ways something could survive the conditions of a certain type of plant look for analogs on earth and how they survive extreme environments here.

The following is a **list of planet types**:

* [Chthonian planet](http://en.wikipedia.org/wiki/Chthonian_planet)
* [Carbon planet](http://en.wikipedia.org/wiki/Carbon_planet)
* [Circumbinary planet](http://en.wikipedia.org/wiki/Circumbinary_planet)
* [Coreless planet](http://en.wikipedia.org/wiki/Coreless_planet)
* [Desert planet](http://en.wikipedia.org/wiki/Desert_planet)
* [Double planet](http://en.wikipedia.org/wiki/Double_planet)
* [Earth analog](http://en.wikipedia.org/wiki/Earth_analog)
* [Eccentric Jupiter](http://en.wikipedia.org/wiki/Eccentric_Jupiter)
* [Exoplanet](http://en.wikipedia.org/wiki/Exoplanet)
* [Extragalactic planet](http://en.wikipedia.org/wiki/Extragalactic_planet)
* [Gas giant](http://en.wikipedia.org/wiki/Gas_giant)
* [Helium planet](http://en.wikipedia.org/wiki/Helium_planet)
* [Hot Jupiter](http://en.wikipedia.org/wiki/Hot_Jupiter)
* [Hot Neptune](http://en.wikipedia.org/wiki/Hot_Neptune)
* [Ice giant](http://en.wikipedia.org/wiki/Ice_giant)
* [Inner planet](http://en.wikipedia.org/wiki/Inner_planet)
* [Iron planet](http://en.wikipedia.org/wiki/Iron_planet)
* [Mini-Neptune](http://en.wikipedia.org/wiki/Mini-Neptune)
* [Ocean planet](http://en.wikipedia.org/wiki/Ocean_planet)
* [Outer planet](http://en.wikipedia.org/wiki/Outer_planet)
* [Planet](http://en.wikipedia.org/wiki/Planet)
* [Protoplanet](http://en.wikipedia.org/wiki/Protoplanet)
* [Puffy planet](http://en.wikipedia.org/wiki/Puffy_planet)
* [Pulsar planet](http://en.wikipedia.org/wiki/Pulsar_planet)
* [Rogue planet](http://en.wikipedia.org/wiki/Rogue_planet)
* [Super-Earth](http://en.wikipedia.org/wiki/Super-Earth)
* [Super-Jupiter](http://en.wikipedia.org/wiki/Super-Jupiter)
* [Terrestrial planet](http://en.wikipedia.org/wiki/Terrestrial_planet)
* [Trojan planet](http://en.wikipedia.org/wiki/Trojan_planet)

Your alien species will no doubt have many adaptations for its environment. You will need to present them in detail. If it’s weird and unorthodox that’s ok, AS LONG as you have a logical/plausible explanation.

**Requirements:**

The following requirements will be for your alien poster and presentation. The presentation can be in the form of a Prezi or Power Point or some similar presentation platform. Use the Alien poster PPT template found on the scibertalk.weebly.com website. Poster paper will be provided by Mr. Young

* Detailed description of the environment it lives in
* Detailed picture of both/all genders (if applicable); (Picture can be drawn, photo shopped, adapted from existing pictures (don’t copy completely) etc.)
* Explanation of adaptations and unique features AND why they are there; be specific (ex. if it has a double heart system explain why that adaptation is there)
* A Cladogram of its evolution over a period of geologic time (think tens of thousands of years or millions of years)
  + Cladogram Explanation: <http://paleocave.sciencesortof.com/2010/12/diagraming-evolution-or-how-to-read-a-cladogram/>
  + Come up with a Genus and Species name
* Lifespan (in Earth years)
* Typical size, height, weight
* Description of what it needs to maintain homeostasis physiologically (For instance humans require food, water, oxygen, shelter)
  + Description of its diet and/or how it gets energy
  + If it breathes methane or hydrogen great, just be sure to explain how it uses those substances to maintain homeostasis
* Known predators and/or prey (if applicable)
* If it is sentient has it developed society/civilization? If so describe it and show pictures.
  + How advanced is the civilization (stone age, industrialized, pre warp, warp capable, etc.)
  + Technology? Show/explain examples.
* If it is not sentient, what kind of social structure (alpha males, herds, family units, harems, etc. etc.)