$\qquad$
$\qquad$ Date: $\qquad$

## SSEP - Planet Design <br> Astronomy

## Instructions:

For each planet designed, the dimensions need to be specified and calculated, the compositions needs to be determined, the atmosphere (if any) needs to be determined, the surface terrain environment needs to be established (if any), internal activity assessment, satellites need to be specified (if any), and life probability (if any).

## Hint! - Stick close with planets of existing solar systems. This will help with accuracy!

## Remember:

- minimum of 5 planets per solar system
- no two planets are to be identical
- ALL key aspects below must be determined (the BOLD dimensions must be calculated!)
- only 1 planet may hold the key necessities and dimensions for life
- each must be named and must have a validation for that name given


## Planet Name:

$\qquad$
Dimensions:

| Mass (kg) | Orbital Period | Internal Composition |  |
| :---: | :---: | :---: | :---: |
| Diameter (km) | Axis Tilt | Atmospheric Composition |  |
| Radius (km) | Avg. High Temp. <br> ( ${ }^{\circ} \mathrm{C}$ ) | Feat |  |
| Volume (km ${ }^{\text {3 }}$ ) | Avg. Low Temp. <br> ( ${ }^{\circ} \mathrm{C}$ ) | (Land/Ice <br> Formations) |  |
| Density (g/m) | Surface Pressure <br> (bars) |  |  |
| Gravity (m/s ${ }^{\text {2 }}$ ) | Number of <br> Satellites |  |  |
| Distance (AU) | Ring System? <br> (Describe) | Environment <br> (Description) |  |
| Solar Day | Magnetic Field? |  |  |

## Rough Sketch:

Color Included!

