**Ecology Review Guide**

|  |  |
| --- | --- |
| Trophic Level: | How they get energy  Draw an energy pyramid with the 5 trophic levels in the correct location: |
| Producer |  |
| Primary consumer |  |
| Secondary consumer |  |
| Tertiary consumer |  |
| Decomposer |  |

Biomass: How is the biomass pyramid of an ecosystem related to an energy pyramid? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Biome** | **Temperature** | **Precipitation** | **Seasons** | **Important Characteristics** |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |

|  |  |
| --- | --- |
| Predation |  |
| Competition | 2 types: |
| Symbiosis |  |

Mimicry

Batesian:

Müllerian:

|  |  |  |
| --- | --- | --- |
| Mutualism | Commensalism | parasitism |
|  |  |  |

Succession: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Pioneer Organism: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

|  |  |  |
| --- | --- | --- |
| Level | What it is | Example |
|  |  | Earth |
|  | A large group of related ecosystems that have some broad similarities |  |
| Ecosystem |  |  |
|  | A group of populations that live in place. |  |
|  |  | Humans of Baltimore |
|  | A single organism |  |

Biodiversity: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Two benefits of biodiversity: 1. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

2. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

|  |  |  |
| --- | --- | --- |
| Clumped | Random | Uniform |
|  |  |  |

Population Growth (include sketch of pop v. time)

|  |  |
| --- | --- |
| Exponential (Logarithmic) | Linear (logistical or arithmetic) |
|  |  |

Phases of typical growth curves:

|  |  |  |  |
| --- | --- | --- | --- |
| Lag | Log | Stationary | Death |
|  |  |  |  |

Population Density: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Age Structure: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Biogeochemical Cycles: Highlights

|  |  |  |
| --- | --- | --- |
| Carbon | Nitrogen | Water |
|  |  |  |

Climate change

1. Greenhouse effect:

2: Natural Greenhouse effect (& biggest contributor)

3: Human impact on greenhouse effect:

4. Effects: