**Evolution stories Worksheet:**

*Directions: Use this worksheet as a template to create an outline. Fill in the outline on the reverse of this paper to construct a story about a fictional population going through the beginning stages of adaptive evolution.*

Name your species: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**I. Overpopulation:**

A. Describe how more organisms are produced than will survive.

B. Name environmental factors that may be impacting survival of these young offspring (plants and animals)

C. Give an example of this happening in the population.

1. How many fertilized cells (seeds, eggs) are there originally?

2. How many offspring then successfully survive to reproductive age?

**II. Variation:**

1. Describe the unique diversity of 3 traits that exist - even in your single species
2. Where did these characteristics come from?

**III. Struggle for Existence:**

1. Describe the conditions in the environment that create selective pressure (trophic cascade, natural disasters, climate changes, habitat loss, etc.)
2. Pick a fraction of organisms (specifically what phenotype or physical appearance) that will survive each generation because they are better ‘fit’ for passing on the traits and deal with environmental pressures.
   1. Describe at least 3 characteristics of these ‘fit’ individuals.
3. Name any other selective environmental pressures facing the population (young and adult)

**IV. Natural Selection:**

1. Who survives?
2. Who reproduces?

**V. EvolutionaryAdaptation:**

A. State how many generations this process continues.

B. Describe what traits (or what alleles - and the traits those alleles code for) accumulate in the population.

C. What is the phenotype (physical appearance) of the population now compared to the ‘first’ generation?

Name the species that will adapt: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**I. Overpopulation:**

A.

B.

C.

1.

2.

**II. Variation:**

A.

B.

**III. Struggle for Existence:**

A.

1.

2.

3.

B.

1.

2.

3.

C.

1.

2.

**IV. Natural Selection:**

B.

**V. Adaptation:**

A.

B.

C.

\*\*Use this outline to now begin writing your own evolution story\*\*

An analogy: If Mother Nature is the author, Natural Selection is her editor!