**Table 2: *Stage One***

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| **Stage 1 Desired Results** | | |
| ESTABLISHED GOALS - #1  **3-LS3-1. Provide evidence, including through the analysis of data, that plants and animals have traits inherited from parents and that variation of these traits exist in a group of similar organisms.** [Clarification Statement: Examples of inherited traits that vary can include the color of fur, shape of leaves, length of legs, and size of flowers.] [Assessment Boundary: Assessment does not include genetic mechanisms of inheritance nor prediction of traits. Assessment is limited to non-human examples.]  **3-LS3-2. Distinguish between inherited characteristics and those characteristics that result from a direct interaction with the environment. Give examples of characteristics of living organisms that are influenced by both inheritance and**  **the environment.** [Clarification Statement: Examples of the environment affecting a characteristic could include normally tall plants grown with insufficient water or light are stunted; a lizard missing a tail due to a predator; and, a pet dog that is given too much food and little exercise may become overweight.] | ***Transfer*** | |
| *Students will be able to independently use their learning to* | |
| ***Meaning*** | |
| UNDERSTANDINGS  *Students will understand that…*   1. Traits/characteristics can be passed down from parents/grandparents (fur, size of trees, color, eye color) 2. Similar traits and variations of those traits exist with a species 3. Some characteristics are effected by the environment | ESSENTIAL QUESTIONS  *Students will keep considering…*  What traits can organisms inherit from their families?  What are a result of the environment? |
| ***Acquisition*** | |
| KNOWLEDGE  *Students will know…*  About the life cycle  Organisms within a family can have variable characteristics  Characteristics, traits and attributes are interchangeable terms temperature | Science Practice  Analyzing and interpreting data  Constructing explanations (for science) and designing solutions (for engineering) |

**Table 3: *Stage Two***

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| **Stage 2 – Evidence** | | |
| **Coding** | **Evaluative Criteria** | **Assessment Evidence** |
|  |  | PERFORMANCE TASK(S):  Cut out word bank of traits and correctly place in either inherited or environmental column or T chart.  Put two animals together to create a new one. List traits of animal which are inherited and environmentally influenced. Where could your animal survive? Why? |
|  |  | Suggested Resources: |

|  |  |  |
| --- | --- | --- |
| **Stage 1 Desired Results** | | |
| ESTABLISHED GOALS - #1  **3-LS4-2. Use evidence to construct an explanation for how the variations in characteristics among individuals within the same species may provide advantages to these individuals in their survival and reproduction.** [Clarification Statement: Examples might include rose bushes of the same species, one with slightly longer thorns than the other which may prevent its predation by deer; and color variation within a species that may provide advantages so one organism may be more likely to survive and therefore more likely to leave offspring such as rock pocket mice. Examples of evidence could include needs and characteristics of the organisms and habitats involved.] | ***Transfer*** | |
| *Students will be able to independently use their learning to* | |
| ***Meaning*** | |
| UNDERSTANDINGS  *Students will understand that…*   1. Certain traits give organisms in the same species an advantage in survival, findings mates and reproduction 2. Organisms that can adapt to environmental changes will survive | ESSENTIAL QUESTIONS  *Students will keep considering…*  How do inherited traits help organisms survive?  How do inherited traits hinder an organisms survival? |
| ***Acquisition*** | |
| KNOWLEDGE  *Students will know…*  How much inherited traits have an influence on survival  What traits are inherited and what are environmental influences? | Science Practice    6. Constructing explanations (for science) and designing solutions (for engineering) |

**Table 3: *Stage Two***

|  |  |  |
| --- | --- | --- |
| **Stage 2 – Evidence** | | |
| **Coding** | **Evaluative Criteria** | **Assessment Evidence** |
|  |  | PERFORMANCE TASK(S):  White bunny and brown bunny, both in the snow. Which has a better chance of survival and why. Is this an environmental or inherited trait.  Name another animal with inherited or environmental trait that have helped it survive. |
|  |  | Suggested Resources: |