### Adventure Guide – Desert Detectives

<table>
<thead>
<tr>
<th>Target Grade(s):</th>
<th>1&lt;sup&gt;st&lt;/sup&gt;</th>
<th>Time:</th>
<th>2 Hours</th>
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| **Theme:** Plants and animals grow, change and have predictable stages of development (lifecycles). | 1. Describe the life cycle of a plant.  
2. Describe the life cycle of an insect.  
3. Explain at least two differences between the life cycles of plants and insects.  
4. Identify that insects go through metamorphosis.  
5. Describe decomposition, and identify when in a life cycle it occurs.  
6. Identify plants and animals that exist in the local environment.  
7. Identify the Sonoran Desert as the ecosystem in which they live.  
8. Describe the characteristics of a desert environment. |  |

**Desired Outcomes:**  
Students will be able to –

| Key Vocabulary: lifecycle, metamorphosis, parents, offspring, characteristics, decomposition |
| Cross Cutting Concepts: Stability and Change; Cause and Effect |
| Science and Engineering Practices: Asking questions and defining problems, developing and using models, constructing explanations, engaging in argument from evidence, obtaining, evaluation and communicating information |

**Arizona Science Standards:**  
1.L1U1.6 – Observe, describe and predict life cycles of animals and plants.  
1.L3U1.9 – Obtain, evaluate and communicate information to support an evidence based explanation that plants and animals produce offspring of the same kind, but offspring are generally not identical to each other or their parents.

Field Trip Activities:

- Dissect cactus fruit to discover what’s inside.
- Examine live meal worms and their lifecycle.
- Dig through dirt to find the decomposers.