

5th Grade (and up)

“Science of Survival”

2 Hours

Field Trip Overview

Theme: Using the inquiry process we can learn how plants have adapted to survive in specific habitats.

Desired Outcomes

Students will be able to...

1. Identify the desert they live in
2. Formulate questions based on observations
3. Make reasonable predictions based on observations and prior knowledge
4. Utilize the scientific inquiry process to conduct simple investigations
5. Collect and record data in an organized and appropriate format
6. Analyze their data and form conclusions based on data
7. Explain how leaf color and size can help a plant survive
8. Explain the 5 different strategies seeds use for dispersal
9. Explain why cactus have ribs as a survival strategy
10. Apply their understanding of plant survival adaptations to create a new “survival plant” for given habitat conditions

Standards

Science – Strand 1: Inquiry Process – Concept 1: Observations, Questions, and Hypotheses

PO1. Formulate a relevant question through observations that can be tested by an investigation

PO 2. Formulate predictions in the realm of science based on observed cause and effect relationships

Science – Strand 1: Inquiry Process – Concept 2: Scientific Testing (Investigating and Modeling)

PO 1. Demonstrate safe behavior and appropriate procedures in all science inquiry

PO 3. Conduct simple investigations based on student-developed questions in life, physical, and Earth and space sciences

PO 4. Measure using appropriate tools and units of measure

PO 5. Record data in an organized and appropriate format

Science – Strand 1: Inquiry Process – Concept 3: Analysis and Conclusions

PO 1. Analyze data obtained in a scientific investigation to identify trends and form conclusions

PO 2. Analyze whether the data is consistent with the proposed explanation that motivated the investigation

PO 3. Evaluate the reasonableness of the outcome of an investigation

Science – Strand 1: Inquiry Process – Concept 4: Communication

PO 1. Communicate verbally or in writing the results of an inquiry

PO 3. Communicate with other groups or individuals to compare the results of a common investigation

Math-

5.MP.1- Make sense of problems and persevere in solving them.

5.MP.3- Construct viable arguments and critique the reasoning of others.

5.MP.4- Model with mathematics.

ELA-

5.W.2: Write informative/explanatory texts to examine a topic and convey ideas and information clearly.

5.SL.1: Engage effectively in a range of collaborative discussions with diverse partners on grade 5 topics and texts, building on others’ ideas and expressing their own clearly.

Desert Botanical Garden Sonoran Desert Adventures

5.SL.1.b: Follow agreed-upon rules for discussions and carry out assigned roles.

5.SL.1.c: Pose and respond to specific questions by making comments that contribute to the discussion and elaborate on the remarks of others.

5.SL.1.d: Review the key ideas expressed and draw conclusions in light of information and knowledge gained from the discussions.

5.SL.2: Summarize a written text read aloud or information presented in diverse media and formats, including visually, quantitatively, and orally.