

Grade Level: 7th

Subject Area(s): Natural Selection and Adaptations

Goal(s): Construct an explanation based on evidence that describes how genetic variations of traits in a population increase some individuals' probability of surviving and reproducing in a specific environment

Objective(s): Students will understand that adaptations can happen by natural selection acting over generations and it is an important process by which species change over time in response to changes in environmental conditions

Background Knowledge:

Producers
 Consumers
 Habitat
 Photosynthesis
 Autotrophs
 Heterotrophs
 Food web
 Conservation
 Energy pyramid
 Abiotic
 Biotic
 Organism
 Population
 Community
 Ecosystem
 Biome

Vocabulary:

Interdependence – ntk^wels (cooperation)
 Biodiversity
 Trait
 Gene
 Sexual and Asexual Reproduction
 Adaptation
 Variation
 Niche
 Charles Darwin
 Natural Selection
 Evolution
 Fitness
 Carrying capacity
 Symbiosis
 Co-evolution

Spokane Tribal Values/Tribal Connection:

Land and environment
 Respect
 Relationships
 Home
 Community
 Honor

Lesson Teaching Plan:**The teacher will:**

Teacher will model and teach how to make quiet observation at "Benjamin" or "Turtle" and then, in a separate trip observe interactions. (60-90mins)

Teacher will provide examples of Spokane and other cultural models of abiotic/biotic relationships. Teacher will explore how a peoples' culture is shaped by their environment. Ceremonies revolved around salmon; with the dams in place, Spokane's no longer practice.

Teacher will have the students create a project that represents our objective using a menu of different types of models they can select from using different mediums (e.g. picture, videos, songs, clay, models, power point.)

Materials Needed:

Visit lakes on the reservation - Brian
Crosley Water Resources - Tribal
member representation

Activity:

Observations

Models

Project

Assessment: *Pre-Test/Post-Test Instrument*

Each day – exit ticket

Written reasoning for creation of their project.

Day1: ID biomes for tomorrow Day3: Select how you are going to represent your model

Day2: Provide a list of organisms (don't forget plants ☺) Day4: List of materials needed for model

Enrichment:

Have student write their own "coyote" story about their project. The story must reflect a lesson for different interpretations – DO NOT state the moral/lesson.

LESSON ALIGNED TO:

NGSS

LS2.A

LS2.C

LS1.C

LS2.B

COMMON CORE STANDARDS:

[CCSS.ELA-LITERACY.RST.6-8.3](#)

[CCSS.ELA-LITERACY.RST.6-8.7](#)

[CCSS.ELA-LITERACY.SL.7.1.B](#)

[CCSS.ELA-LITERACY.RST.6-8.4](#)


[CCSS.ELA-LITERACY.SL.7.1](#)

[CCSS.ELA-LITERACY.SL.7.1.C](#)

[CCSS.ELA-LITERACY.SL.7.1.D](#)

[CCSS.ELA-LITERACY.SL.7.5](#)

[CCSS.ELA-LITERACY.SL.7.4](#)



Community Resources

Spokane Tribal Language Representative to accompany class to Benjamin and Turtle - both times.

Spokane Tribal Language Representative to discuss the Tribal Values PRIOR to visiting the lake.