

Grade Level: 7th

Subject Area(s): Interdependent Relationships in Ecosystems

Goal(s): For students to understand their interdependent relationship with their surrounding ecosystems and their roles as care takers and understanding their impact on the environment.

Objective(s): Students will create a relationship model that show interactions of organisms and populations of organisms are interdependent on their environmental interactions both with living factors (biotic) and non-living factors (abiotic).

Background Knowledge:

Observe environment
Energy Transfer
Food Chain
Energy Pyramid
Food web
Producers
Consumers

Vocabulary:

Interdependence – ntk^wels
Energy transfer
Matter transfer
Photosynthesis
Autotrophs
Heterotrophs
Food web
Conservation
Energy pyramid
Abiotic
Biotic
Organism
Population
Community
Ecosystem
Biome

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.6-8.4](#)

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

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

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

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

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

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

[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.