ECO2-Symbiosis/keystone species Lesson Plans

Teacher: JOHNSTON, HARDMAN, CANNON, HAWTHORNE, HAMILTON, CARMACK

Course/ Subject: Biology

Date of Instruction: 12/6/2022

Opening (I Do)

An engaging process for lesson introduction that is specifically planned to encourage equitable and purposeful student participation. Describe the instructional process that will be used to introduce the lesson.

TKES 1, 2, 3,4,5, 8,10

SB5. Obtain, evaluate, and communicate information to assess the interdependence of all organisms on one another and their environment.

Learning Target:

I will understand and explain how parts of ecosystems work together and affect outcomes of populations.

Success Criteria:

- I can arrange the levels of organization in the biosphere in order from smallest to most complex.
- I can differentiate between a population & a community.
- I recognize factors that determine the carrying capacity of a population in an
 ecosystem.
- I can identify density dependent and density independent limiting factors.
- I can differentiate between exponential and logistic population growth.
- I can interpret a population curve graph
- I can recognize the difference between symbiosis relationships: parasitism, commensalism and mutualism.
- I understand the importance of keystone species in an ecosystem.

Introduction/Connection:

What are relationships? Give Examples in all disciplines. Are Relationships important? Examples of relationships in biology?

DIRECT INSTRUCTION:

Symbiosis Review Symbiosis carousel Keystone Species discussion

Work Period (We Do, You Do)

Students learning by doing/demonstrating learning expectations. Describe the instructional process that will be used to engage the students in the work period.

TKES 1, 2, 3, 4, 5, 7. 8,10

GUIDED PRACTICE:

Symbiosis/keystone/Altruism Slideshow

Keystone Species Video w viewing questions "Some species are more equal than others" How the Wolves changed rivers yellowstone video

INDEPENDENT/COLLABORATIVE PRACTICE/DIFFERENTIATION:

Symbiosis/keystone/Altruism Notes Symbiosis Carousel Keystone Species Video notes Ecology Vocab

Closing (We Check)	SUMMARIZE/CHECK FOR UNDERSTANDING:
Describe the instructional process that will be used to close the lesson and check for student understanding . TKES: 1,2,3, 4,5,6,7,8	EOC REVIEW