SIOP® Lesson Plan Template 1

PEARSON

Date: January 11, 2012, Rachel Gruner, Robious MS

Grade/Class/Subject: 6th Science

Unit/Theme: Ecology

Standards: 7.11, 7.12

Content Objective(s): I can conduct a simulation that models a population of pandas over time.
I can create bar graphs to interpret data and make predictions.
I can comprehend that populations of species are affected by limiting factors.

Language Objective(s): I can explain how a population would be affected by limiting factors.

Key Vocabulary	Supplementary Materials
population limiting factor TALLPC	population lab handout Dice Containers Colored pencils

SIOP FEATURES

Preparation
☒ Adaptation of content
☒ Links to background
☒ Links to past learning
☒ Strategies incorporated

Scaffolding
☒ Modeling
☒ Guided practice
☒ Independent practice
☐ Comprehensible Input

Group Options
☒ Whole class
☐ Small groups
☒ Partners
☒ Independent

Integration of Processes
☒ Reading
☒ Writing
☒ Speaking
☒ Listening

Application
☒ Hands-on
☒ Meaningful
☒ Linked to objectives
☒ Promotes engagement

Assessment
☒ Individual
☒ Group
☒ Written
☒ Oral

Lesson Sequence:

Day 1- Warm-up/Introduction:Review population dynamics—factors that influence the numbers within a population. Students will write down on a piece of paper the things that they think will cause a population to change size. They will also answer the question what does a limiting factor mean. This will be the grouping strategy for how students will be paired up for the rest of the lesson.

Students will work independently to answer the questions: What are some factors that would cause a population to grow? and What are some limiting factors which would cause a population to die? As a class we will discuss these answers and chart the answers.

Mini-Lesson:
1. There will be two mini-lessons within this lab.
2. The first mini lesson will be about how to change a fraction to decimal to precent.
3. We will go over an example as a class together, 2/10 and they will work indepedently to change it to a decimal and a precent. As a class we will discuss the different ways you can go about doing this.

Guided Practice:

SIOP® Lesson Plan Template 1

1. As a class, students will read over the first simulation and work on figuring out the probability of survival (question 3). Once all students work has been checked then they may begin the simulation 1.

Application: Students will work with their group to complete the second simulation and answer the limiting factor questions. Also students may work individually or together in order to find out the probability of survival.

Day 2- 2nd Mini Lesson: Students will review the parts to a graph. The teacher will teach the acronymn TALLPC inorder to remember all the parts. T- Title, A- Axis, L- Label Axis, Label Units, P- Plot, C-Color.
Guided Practice into independent: As a class we will work together to complete the title, axis, label of axis, label of units, and plotting the the first couple of points from the first simulation. Students will independently continue to finish the graph as the teacher walks around differentiating for students who need help or finish up early.
Closure: Students will refer back to the two original questions. what are some factors that would cause a population to grow? and What are some limiting factors that would cause a population to die? Individually they will add to their list based on their simulations then we will discuss as a class what was added and why.

Reflections: