



#4 Biodiversity STP (23-24)

Duration: 6 Weeks

Unit dates: 23rd Aug 2023 - 4th Oct 2023

Subjects: Language, Library Media, Science, English, Physical Education

Grades: 5

Planning



Transdisciplinary theme

Sharing the planet

Transdisciplinary theme focus

- rights and responsibilities in the struggle to share finite resources with other people and with other living things
- communities and the relationships within and between them



Central idea

Biodiversity relies on maintaining the balance of organisms within systems.



Learner profile attributes

Caring, Balanced



Key concepts

Causation, Connection, Form



Related concepts

Concepts

- **Connection:** biodiversity



Lines of inquiry

- What biodiversity means and its connection to survival (biodiversity, connection)
- How the balance of organisms within systems works (balance, perspective)

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- How different systems interact (systems, function)
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Approaches to learning

Research Skills

Research Skills

Research Skills (General)

Teaching the ATL skills

SEL Unit 3 Relationship Skills

Research skills as students need to make connections between various sources of information.



Subject standards

Physical Education

Health

Active living

- Compares the health benefits of participating in selected physical activities.

Self-expression & enjoyment

Interactions

- Analyzes different physical activities for enjoyment and challenge, identifying reasons for a positive or negative response.

Working with others

Interactions

- Accepts, recognizes and actively involves others with both higher and lower skill abilities into physical activities and group projects.

Personal Responsibility

Interactions

- Engages in physical activity with responsible interpersonal behavior (e.g., peer to peer, student to teacher, student to referee).

Safety

Interactions

- Applies safety principles with age-appropriate physical activities.

English

Reading: Informational Text

Craft and Structure

- CCSS.ELA-LITERACY.RI.5.6 - Analyze multiple accounts of the same event or topic, noting important similarities and differences in the point of view they represent. (CCSS.ELA-LITERACY.RI.5.6)

Integration of Knowledge and Ideas

- CCSS.ELA-LITERACY.RI.5.7 - Draw on information from multiple print or digital sources, demonstrating the ability to locate an answer to a question quickly or to solve a problem efficiently. (CCSS.ELA-LITERACY.RI.5.7)

- CCSS.ELA-LITERACY.RI.5.8 - Explain how an author uses reasons and evidence to support particular points in a text, identifying which reasons and evidence support which point(s). *(CCSS.ELA-LITERACY.RI.5.8)*
- CCSS.ELA-LITERACY.RI.5.9 - Integrate information from several texts on the same topic in order to write or speak about the subject knowledgeably. *(CCSS.ELA-LITERACY.RI.5.9)*

Writing

Production and Distribution of Writing

- CCSS.ELA-LITERACY.W.5.5 - With guidance and support from peers and adults, develop and strengthen writing as needed by planning, revising, editing, rewriting, or trying a new approach. (Editing for conventions should demonstrate command of Language standards 1-3 up to and including grade 5 here.) *(CCSS.ELA-LITERACY.W.5.5)*

Range of Writing

- CCSS.ELA-LITERACY.W.5.10 - Write routinely over extended time frames (time for research, reflection, and revision) and shorter time frames (a single sitting or a day or two) for a range of discipline-specific tasks, purposes, and audiences. *(CCSS.ELA-LITERACY.W.5.10)*

Research to Build and Present Knowledge

- CCSS.ELA-LITERACY.W.5.9 - Draw evidence from literary or informational texts to support analysis, reflection, and research. *(CCSS.ELA-LITERACY.W.5.9)*

Text Types and Purposes

- CCSS.ELA-LITERACY.W.5.1 - Write opinion pieces on topics or texts, supporting a point of view with reasons and information. *(CCSS.ELA-LITERACY.W.5.1)*

Science

Ecosystems: Interactions, Energy, and Dynamics

Developing and Using Models

- 5-LS2-1 Develop a model to describe the movement of matter among plants, animals, decomposers, and the environment.

Earth and Human Activity

Obtaining, Evaluating, and Communicating Information

- 5-ESS3-1 Obtain and combine information about ways individual communities use science ideas to protect the Earth's resources and environment.

Earth's Systems

Developing and Using Models

- 5-ESS2-1 Develop a model using an example to describe ways the geosphere, biosphere, hydrosphere, and/or atmosphere interact.

Using Mathematics and Computational Thinking

- 5-ESS2-2 Describe and graph the amounts of salt water and fresh water in various reservoirs to provide evidence about the distribution of water on Earth.

From Molecules to Organisms: Structures and Processes

Engaging in Argument from Evidence

- 5-LS1-1 Support an argument that plants get the materials they need for growth chiefly from air and water.

Energy

Developing and Using Models

- 5-PS3-1 Use models to describe that energy in animal's food (used for body repair, growth, motion, and to maintain body warmth) was once energy from the sun.



Connections: Transdisciplinary and past

Physical Education: During this unit students will play the Sun Block Game. In this game, students will demonstrate the transfer of food energy in a lake habitat. They will learn how sunlight and living organisms affect an animal's ability to survive. They will also see for themselves what a healthy habitat looks like compared to one that has been invaded by an invasive plant species.

Implementing



Resources



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