How We Express Ourselves: Life Cycles

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Summary

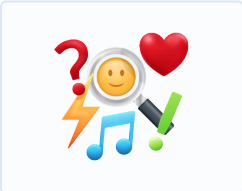
How We Express Ourselves: Life Cycles Current

Subject	Year	Start date	Duration
Science Lab, Visual Arts	Second Grade	Week 3, April	6 weeks

6 of 6 weeks

Inquiry

Transdisciplinary Theme



How we express ourselves

The Central Idea

Cycles create the journey of life.

Lines of Inquiry

- An investigation and comparison of life cycles of plants and animals
- The effect of environmental changes on life cycles
- A study of the aesthetic nature and the appreciation of the beauty of a life cycle
- Investigate how animals and insects disperse seeds and pollinate plants

Teacher questions

- What is a life cycle?
- How are life cycles affected by human caused changes in the environment?
- How are life cycles considered to be beautiful and unique?
- How are life cycles similar and different to one another?
- How do animals, insects, and plants help/hinder the life cycle process of other animals, insects and plants?

Learning Goals

Scope & Sequence

Visual Arts

[IB] Responding

Conceptual Understandings

The art is a means of communication and expression.

Learning Outcomes

enjoy experiencing artworks

describe what they notice about an artwork

Key and Related Concepts

Key Concepts

Key Concepts	Key questions and definition	Related concepts	Subject Focus
Form	**What is it like?** The understanding that everything has a form with recognizable features that can be observed, identified, described and categorized.	transformation,reproductive,cycles, survival, creation	Science Lab, Visual Arts
Causation	**Why is it as it is?** The understanding that things do not just happen; there are causal relationships at work, and that actions have consequences.		
Change	**How is it transforming?** The understanding that change is the process of movement from one state to another. It is universal and inevitable.		
Connection	**How is it linked to other things?** The understanding that we live in a world of interacting systems in which the actions of any individual element affect others.	atmosphere,systems	Science Lab, Visual Arts

Developing IB Learners

Learner Profile


Inquirers


Thinkers


Communicators


Reflective

Description

research skills (questioning, observing, collecting, recording, organizing, and interpreting data), self-management skills (organization, time-management) thinking skills (knowledge, analysis)

ATL Skills

Approaches to Learning

Description

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Communication Skills

- Exchanging information - Listening, interpreting and speaking
    - Listening
        - Listen to, and follow the information and directions of others.
        - Listen actively to other perspectives and ideas.
        - Ask for clarifications.
        - Listen actively and respectfully while others speak.
    - Speaking
        - Speak and express ideas clearly and logically in small and large groups.
        - Give and receive meaningful feedback and feedforward.
        - State opinions clearly, logically and respectfully.
        - Discuss and negotiate ideas and knowledge with peers and teachers.
        - Communicate with peers, experts and members of the learning community using a variety of digital environments and media.
- Literacy - Reading, writing and using language to gather and communicate information

Reading

- Read a variety of sources for information and for pleasure.
- Read critically and for comprehension.
- Make inferences and draw conclusions.
- Use and interpret a range of terms and symbols.

Writing

- Use appropriate forms of writing for different purposes and audiences.
- Paraphrase accurately and concisely.
- Record information and observations by hand and through digital technologies.
- Use a variety of scaffolding for writing tasks.
- Organize information logically.
- Make summary notes.
- Communicate using a range of technologies and media.
- Understand and use mathematical notation and other symbols.
- Responsibly participate in, and contribute to, digital social media networks.

Assessment & Resources

Ongoing Assessment

What are the possible ways of assessing students' understanding of the central idea? What evidence, including student-initiated actions, will we look for?

Goal: Your goal is to explain your life cycle to a group of students on a field trip.

Role: You are a plant or animal.

Audience: A group of students on a field trip.

Product: You will create a diagram that exhibits and explains your life cycle . You will also create a writing that explains each step of your life cycle. The writing will include pertinent vocabulary terms reviewed throughout the unit.

Standard:

S2L1. Obtain, evaluate, and communicate information about the life cycles of different living organisms. a. Ask questions to determine the sequence of the life cycle of common animals in your area: a mammal such as a cat, dog or classroom pet, a bird such as a chicken, an amphibian such as a frog, and an insect such as a butterfly. b. Plan and carry out an investigation of the

life cycle of a plant by growing a plant from a seed and by recording changes over a period of time. c. Construct an explanation of an animal's role in dispersing seeds or in the pollination of plants. d. Develop models to illustrate the unique and diverse life cycles of organisms other than humans.

What are the possible ways of assessing students' prior knowledge and skills? What evidence will we look for?

The students will show their understanding through drawing and labeling the stages in various life cycles. The student will also complete a Venn Diagram comparing and contrasting two different life cycles that were discussed during the unit.

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Learning Experiences

Designing engaging Learning Experiences

1. During their independent reading and shared reading, students and teacher will read a variety of books related to the life

cycles.

2. Students will observe the weekly progress of the life cycle of a plant and complete a “Plant Journal”. They then will draw a replica of their observation in their journals. Students will share and discuss their findings with the class in order to deepen their understanding about the various stages.

3. In collaborative groups, students will compare and contrast selected life cycles. The focus will be on the various stages of the organism. Students will discuss and record their findings and observations on a graphic diagram.

4. Students will investigate the various stages, what it should look like. They will write a descriptive paragraph and five descriptive facts about the organism. Using these facts, students will create imaginative activities that they could do on their organism.

Music

Key Concepts: Form, Connection, Causation

Central Idea: Songs have a life-cycle.

Learner Profile: Reflective, Knowledgeable

Activities:

-Create rhythm chains that express plant words, develop the rhythm chains into movement or pentatonic improvisation

-Discuss the "life cycle" of music as related to musical form

-Perform musical songs and dances reflecting on their aesthetic beauty, if time write or draw about personal favorite beautiful songs

Science Class Instruction:

Key Concepts: causation, connection, form, change

- Students will ask questions and make models to determine the life cycle sequence of various animals and plants.
- Students will investigate a plant life cycle by growing it from seed and recording changes.
- Chicken observations: through their investigation of a plant life cycle, students will make conclusions as to how the plant life cycle continues and if other organisms and factors can help with seed dispersal
- Using I-pads and Flip-Grid, students will observe and record evidence of organism life cycles on the school grounds and justify why they think their evidence is part of a life cycle (function)
- Collaborative groups will pick the life cycle of one organism and develop an action project.

Art Class Instruction:
Key Concepts: Form, Connection, Causation

Activities:

- Students will create Georgia O'Keeffe-Inspired painted flowers with insects that display a life-cycle, such as egg, caterpillar, chrysalis, and adult butterfly.

Spanish Class Instruction:

Key Concepts: Form, Connection, Causation

-Students will practice life cycle vocabulary in Spanish via online resources.

-Students will read Spanish adaptation of The Very Hungry Cater Pillar."

Provocations

The teacher will bring in a variety of live animals into the classroom. Examples could be meal worms, tadpoles, caterpillars, etc. Students will begin to ask questions about these items and wonder what we will be studying and learning. During independent and reading and shared reading, students and teacher will read a variety of books relating to life cycles and a variety of animals.

Reflections

General Reflections

Looking Back

Liz Jacobs May 9, 2022 at 3:26 PM

Students were excited about learning various animal and plant life cycles. We would like to do more hands on activities, such as getting the chicken coop at the school. Students participated in research and note taking. They made posters with life cycle diagrams that they will use to teach to the other students.

Looking Forward

Liz Jacobs May 9, 2022 at 3:22 PM

We do not feel that this planner fits well with the transdisciplinary theme of "how we express ourselves." Looking forward, we would like to put his planner under another transdiciplinary theme.

Also, we would like to start this planner sooner in the spring so that we have enough time to view the actual life cycle changes, such as growing a seed into a plant or watching the darkling beetle metamorphosis.

Stream & Resources

Resources

Note posted on Aug 15, 2019 at 9:49 AM

Videos and non-fiction literature that contain information about the starts, moons, sun, galaxies and planets; NASA and LION system websites; chart paper; Venn Diagrams; Moon Journals;materials for Visitors Guides; Collaboration with art teacher to

view and reproduce night sky images.