Science 7 Interactions Within Ecosytems Unit

Big Idea: We are all connected

Outcome:

IE7.4 Analyze how ecosystems change in response to natural and human influences, and propose actions to reduce the impact of human behaviour on a specific ecosystem.

Analyze 🡪 relationship (ecosystems and natural and human interaction)

Propose 🡪 actions (reduce impact of humans)

Understandings:

That succession has many stages.

That there are many ecological issues, some caused by natural conditions and some caused by human conditions.

That there are many different ways to sustain the environment.

That scientific predictions are based on data and patterns

That creating solutions to challenges and defending points of view requires knowledge of the issues

Essential questions:

1. What is succession?
2. What are some ecological questions or issues and how are they caused?
3. How do ecosystems advance (what do they look like)?
4. What problems will ecosystems have due to natural or human causes?
5. How do we brainstorm solutions and defend ourselves?
6. How do we find balance (sustainability)?
7. How can we use data and patterns?

Students need to know:

-what succession is

-what are some ecological questions and how to form questions

-how ecosystems advance

-problems ecosystems will have

-characteristics of specific areas

-how to brainstorm solutions and defend themselves

-how we can find a balance and how to propose solutions

-Vocab – sustainability, balance, ecological succession, pioneer species, climax community, scientific, societal, technological and environmental factors, primary and secondary succession, sustainable environment, impact studies

And be able to:

-identify evidence of ecosystem succession

-propose ecological questions from practical problems

-predict what an ecosystem will look like

-identify and refine questions

-select and synthesize information

-propose a course of action/defend a position

-be sensitive and responsible (balance)

-provide examples of technological activities