

# Grade 3

## Planning Doc

### **5-ESS3-1: Protecting Earth's Resources and Environment**

Obtain and combine information about ways individual communities use science ideas to protect the earth's resources and environment. (Systems and System Models) - In all grades

### **3-LS4-4: Environmental Change Solution**

Make a claim about the merit of a solution to a problem caused when the environment changes and the types of plants and animals that live there may change. (Systems and System Models)

### **2-ESS2-3: Water on Earth**

Obtain information to identify where water is found on Earth and that it can be solid or liquid. (Patterns)

### **5-ESS2-2: Water Availability and Distribution**

Describe and graph the amounts and percentages of water and fresh water in various reservoirs to provide evidence about the distribution of water on Earth. (Scale, Proportion, and Quantity)

#### **Assessments**

5-ESS3-1	Space Pollution	Evidence Statement
3-LS4-4	Animal Crossing	Evidence Statement
2-ESS2-3	Touring Iceland's Water	Evidence Statement
5-ESS2-2	Svalbarði Water - The World's Most Expensive Water	Evidence Statement

#### **Mini Lessons**

Engaging in Argumentation from Evidence Level 1 - Constructing Arguments (3-LS4-4)

Engage in Argument with Evidence Level 2 - Evaluating Arguments (3-LS4-4)

Mathematical & Computational Thinking Level 2 - Measuring & Graphing Quantities (5-ESS2-2)

Patterns Level 1 - Observational Patterns Mini-Lesson (2-ESS3-2)

System Level 2 - Components and Interactions Mini-Lesson (3-LS4-4)(3-LS4-4)(5-ESS3-1)

Quantity Level 2 - Physical Quantities (5-ESS2-2)

#### **Single Point Rubrics**

Obtain, Evaluate, Communicate Information

Engaging in Argumentation

Mathematics & Computational Thinking

#### **Graphic Organizers**

Earth and Human Interaction System Model Graphic Organizer (Student Version) (5-ESS3-1)

Environmental Change Solution Graphic Organizer (Student Version) (3-LS4-4)

Patterns of Water on the Earth Graphic Organizer (Student Version) (2-ESS2-3)

Distribution of Water Quantity Graphic Organizer (Student Version) (5-ESS2-2)

## Possible Related Mini Lessons to PYP Concepts

[System Level 1 - Parts Working Together Mini-Lesson](#)

[Structure and Function Level 1 - Structure and Function](#)

[Structure and Function Level 2 - Thinking in Structure and Function](#)

[Causation Level 1 - Cause and Effect Mini-Lesson](#)

[Causation Level 2 - Testing Causes Mini-Lesson](#)

[Causation Level 3 - Causal Relationships Mini-Lesson](#)

## PYP Concepts

### **Causation: Why is it like it is?**

The understanding that things do not just happen, that there are causal relationships at work, and that actions have consequences.

### **Responsibility: What is our responsibility?**

The understanding that people make choices based on their understandings, and the actions they take as a result do make a difference.

### **Function: How does it work?**

The understanding that everything has a purpose, a role or a way of behaving that can be investigating.