

# Watching Walrus

## Education Content Standards

### Alaska Science Performance Standards (GLEs):

#### 5<sup>TH</sup> GRADE:

**The student demonstrates an understanding of science as an inquiry based process by:**

SA1.1 (5-8) asking questions, predicting, observing, describing, measuring, classifying, making generalizations, inferring and communicating.

SA2.1 (5) supporting the student’s own statements with facts from a variety of resources and by identifying their sources.

**Student demonstrates an understanding of the concepts of life science by:**

SC2.1 (5) identifying and sorting animals into groups using basic external and internal features.

SC3.2 (5) organizing a simple food chain of familiar plants and animals that traces the source of energy back to sunlight.

**Student demonstrates an understanding that problem solving involves different ways of thinking by:**

SE2.1 (5) Investigating a problem or project over a specified period of time and identifying the tools and processes used in that project.

**Students demonstrate and understanding of the bases of the advancement of scientific knowledge by:**

SG2.1 (5) reviewing and recording results of investigations into the natural world.

#### 6<sup>TH</sup> GRADE:

**The student demonstrates an understanding of science as an inquiry based process by:**

SA1.1 (6) asking questions, predicting, observing, describing, measuring, classifying, making generalizations, inferring and communicating.

SA2.1 (6) identifying and differentiating fact from opinion.

**Students demonstrate an understanding of how energy can be transformed, transferred, and conserved by:**



SB3.1 (6) recognizing that most substances can exist as a solid. Liquid, or gas depending on temperature.

**Student demonstrates an understanding of the concepts of life science by:**

SC2.1 (6) using a dichotomous key to classify animals and plants into groups using external and internal features.

SC3.2 (6) organizing a food web using familiar plants and animals.

**Student demonstrates an understanding that problem solving involves different ways of thinking by:**

SE2.2 (6) Comparing the student's work to the work of peers in order to identify multiple paths that can be used to investigate a question or problem.

## 7<sup>TH</sup> GRADE:

**The student demonstrates an understanding of science as an inquiry based process by:**

SA1.1 (5-8) asking questions, predicting, observing, describing, measuring classifying, making generalizations, inferring and communicating.

SA2.1 (7) identifying and evaluating the sources used to support scientific statements.

**Students demonstrate an understanding of how energy can be transformed, transferred, and conserved by:**

SB1.1 (7) using physical properties (i.e. density, boiling point, freezing point, conductivity) to differentiate among and/or separate materials (i.e. elements, compounds, and mixtures).

**Student demonstrates an understanding of the concepts of life science by:**

SC2.2 (7) identifying the seven levels of classification of organisms.

SC3.2 (7) classifying organisms within a food web as producers, consumers, or decomposers.

**The student demonstrates an understanding that problem solving involves different ways of thinking by:**

SE2.2 (7) Comparing the student's work to the work of peers in order to identify multiple paths that can be used to investigate a question or problem.

## 8<sup>TH</sup> GRADE:

**The student demonstrates an understanding of science as an inquiry based process by:**

SA1.1 (8) asking questions, predicting, observing, describing, measuring classifying, making generalizations, inferring and communicating.

**Students demonstrate an understanding of how energy can be transformed, transferred, and conserved by:**



SB1.1 (8) using physical and chemical properties (i.e. density, boiling point, freezing point, conductivity, flammability) to differentiate among and/or separate materials (i.e. elements, compounds, and mixtures).

**Student demonstrates an understanding of the concepts of life science by:**

SC2.1 (8) placing vertebrates into correct classes of taxonomy based on external, observable features.

SC3.1 (8) stating that energy flows and that matter cycles but is conserved within an ecosystem.

**Student demonstrates an understanding that problem solving involves different ways of thinking by:**

SE2.2 (8) Comparing the student's work to the work of peers in order to identify multiple paths that can be used to investigate and evaluate potential solutions to a question or problem.

**National Science Education Standards:**

**Content Standard A: Science & Inquiry**

- Abilities necessary to do scientific inquiry (5-8)
- Understanding about scientific inquiry (5-8)

**Content Standard B: Physical Sciences**

- Properties and changes of properties in matter (5-8)
- Transfer of Energy (5-8)

**Content Standard C: Life Sciences**

- Structure and function in living systems (5-8)
- Populations and ecosystems (5-8)

**Content Standard G: History and Nature of Science**

- Science as a human endeavor (5-8)

