Shells & Insects  Grade 2 Curriculum
addresses the following Alaska State Teaching Standards

Unit One: Introduction to Mollusks
Activity #1 Introduction to Mollusks
Science:
A-12 Biological diversity
A-14 Living things and their environments

Activity #2 Shell Prints
Arts:
A-1 Participate in the arts
A-3 Materials, tools, techniques, and processes
A-4 Demonstrate creativity

Activity #3 Shell Coat of Arms
Arts:
A-1 Participate in the arts
A-3 Materials, tools, techniques, and processes
A-4 Demonstrate creativity
B-1 Recognize Alaska Native culture & arts
B-3 Recognize tradition in the arts

Activity #4 Clam Chowder
Language Arts:
B-1 Meaning from written, oral, and visual information
C-5 Project collaboration

Activity #5 Introducing Scallops
Science:
A-12 Biological diversity
A-14 Living things and their environments

Activity #6 Age a Cockle
Science:
A-12 Biological diversity
A-14 Living things and their environments
C-6 Scientific discovery

Activity #7 Life of a Mussel
Science:
A-12 Biological diversity
A-14 Living things and their environments
A-15 Using local knowledge

Unit Two: The Bivalves
Activity #1 Introduction to Bivalves
Science:
A-12 Biological diversity

Activity #2 Making Stuffed Bivalves
Arts:
A-1 Participate in the arts
A-3 Materials, tools, techniques, and processes
A-4 Demonstrate creativity

Activity #3 Introduction to Clams
Language Arts:
A-3 Demonstrate speaking skills

Science:
A-12 Biological diversity
A-14 Living things and their environments

Activity #4 Clam Chowder
Language Arts:
B-1 Meaning from written, oral, and visual information
C-5 Project collaboration

Activity #5 Introducing Scallops
Science:
A-12 Biological diversity
A-14 Living things and their environments

Activity #6 Age a Cockle
Science:
A-12 Biological diversity
A-14 Living things and their environments
C-6 Scientific discovery

Activity #7 Life of a Mussel
Science:
A-12 Biological diversity
A-14 Living things and their environments
A-15 Using local knowledge

Unit Three: Univalves
Activity #1 Introduction to Univalves
Language Arts:
A-2 Writing conventions

Activity #2 Individual Differences
Science:
A-12 Biological diversity
A-14 Living things and their environments
A-15 Using local knowledge

Activity #3 Moon Snail Attacks
Science:
A-12 Biological diversity
A-14 Living things and their environments
B-2 Tools of scientific investigation
C-5 Collaboration
Activity #4 Hairy Triton—Name that Shell
Science:
A-12 Biological diversity
B-3 Understand that scientific inquiry involves multiple paths
C-5 Collaboration

Activity #5 Limpets
Science:
A-12 Biological diversity
A-14 Living things and their environments
B-3 Understand that scientific inquiry involves multiple paths
C-5 Collaboration

Activity #6 Count the Snails
Science:
A-12 Biological diversity

Math:
A-1 Numeration
A-3 Materials, tools, techniques, and processes

Activity #7 Abalone
Science:
A-12 Biological diversity
C-3 Group decision-making

Math:
A-3 Arithmetic and computation

Arts:
A-1 Participate in the arts
A-3 Materials, tools, techniques, and processes
A-4 Demonstrate creativity
A-5 Forces of nature

Activity #3 Sun’s Up Chiton
Science:
A-14 Living things and their environments
C-5 Collaboration

Unit Five: Cephalopoda
Activity #1 Introduction to Cephalopoda
Science:
A-12 Biological diversity
A-14 Living things and their environments
B-3 Understand that scientific inquiry involves many paths

Activity #2 Hot Dog Octopus
Science:
A-12 Biological diversity

Activity #3 Lunch Bag Octopus AND Activity #4 Construction Paper Octopus
Arts:
A-1 Participate in the arts
A-3 Materials, tools, techniques, and processes
A-4 Demonstrate creativity
A-5 Forces of nature

Activity #5 Octopus Race
Science:
A-12 Biological diversity
A-14 Living things and their environments
B-3 Understand that scientific inquiry involves multiple paths

Math:
A-3 Arithmetic and computation

Unit Six: Seashell Field Trip
Activity #1 Beach Etiquette
Science:
A-12 Biological diversity
A-14 Living things and their environments
C-3 Cultural influences
C-5 Collaboration

Skills for a Healthy Life:
D-2 Safe and healthy environments

Government:
E-2 Citizens’ responsibilities

Published by the Alaska Sea Grant College Program
http://www.uaf.edu/seagrant/
Activity #2 Make a Plankton Net  
**Science:**  
A-12 Biological diversity  
A-14 Living things and their environments  
C-6 Scientific discovery

Activity #3 Beach Books  
**Science:**  
A-12 Biological diversity  
B-2 Tools of scientific investigation

Activity #4 Arrival Fun  
**Science:**  
A-14 Living things and their environments

**Government:**  
E-2 Citizens’ responsibilities

Activity #5 Life of a Mussel  
**Science:**  
A-12 Biological diversity  
A-14 Living things and their environments  
C-5 Collaboration

Activity #6 Find a Clam  
**Science:**  
A-12 Biological diversity  
A-14 Living things and their environments  
C-6 Scientific discovery

Activity #7 Make an Abalone Run  
**Science:**  
A-12 Biological diversity  
A-14 Living things and their environments

Activity #8 Beach Math—Frequency Distribution  
**Math:**  
A-1 Numeration  
C-1 Using pictures, graphs, and charts

Activity #9 Limpet Race  
**Science:**  
A-14 Living things and their environments  
B-3 Understand that scientific inquiry involves multiple paths

Activity #10 Plankton  
**Science:**  
A-12 Biological diversity  
A-14 Living things and their environments  
C-6 Scientific discovery

Activity #11 Beach Task Cards AND Activity #12 Pantomime  
**Science:**  
A-12 Biological diversity  
A-14 Living things and their environments

**Arts:**  
A-1 Participate in the arts  
A-3 Materials, tools, techniques, and processes  
A-4 Demonstrate creativity  
A-5 Forces of nature

Activity #13 On-Site Review  
**Language Arts:**  
A-3 Demonstrate speaking skills

Unit Seven: From Mollusks to Insects—Water Invertebrates

Activity #1 “Spineless” the Octopus  
**Language Arts:**  
D-1-A Personal experience and prior knowledge

**Science:**  
A-12 Biological diversity

**Arts:**  
A-1 Participate in the arts

Activity #2 Similarities & Differences  
**Language Arts:**  
B-1 Meaning from written, oral, and visual information

**Science:**  
A-12 Biological diversity

Activity #3 Change  
**Geography:**  
A-3 Maps as changing documents

Activity #4 Mollusk Fossils  
**Geography:**  
C-2 Natural regions

Activity #5 Make a Fossil  
**Science:**  
C-6 Scientific discovery
Arts:
A-1 Participate in the arts

Unit Eight: Freshwater Insects
Activity #1 Wiggle, Squiggle—Name That Bug
Science:
A-12 Biological diversity
C-5 Collaboration
C-6 Scientific discovery

Activity #2 Flies—Complete Metamorphosis
Science:
A-12 Biological diversity
C-5 Collaboration
C-6 Scientific discovery

Activity #3 Stoneflies—Gradual Metamorphosis
Science:
A-12 Biological diversity
A-14 Living things and their environments

Activity #4 Mosquitoes in Alaska—Native Lore
Language Arts:
B-1 Meaning from written, oral, and visual information
E-4 Recognize different culture’s communication styles
Science:
A-12 Biological diversity
A-14 Living things and their environments

Activity #5 Adaptation—Be a Filterer
Science:
A-12 Biological diversity
A-14 Living things and their environments

Activity #6 The Predacious Diving Beetle
Science:
A-12 Biological diversity
A-14 Living things and their environments
C-5 Collaboration

Arts:
A-1 Participate in the arts
A-4 Demonstrate creativity

Activity #7 The Dragonfly at Home—Habitat
Science:
A-12 Biological diversity
A-14 Living things and their environments
C-5 Collaboration
C-6 Scientific discovery

Arts:
A-1 Participate in the arts
A-4 Demonstrate creativity

Activity #8 Go Home Caddis Fly
Science:
A-12 Biological diversity
A-14 Living things and their environments
C-5 Collaboration
C-6 Scientific discovery

Arts:
A-1 Participate in the arts

Activity #9 Bug Run
Science:
A-12 Biological diversity
A-14 Living things and their environments
C-5 Collaboration
C-6 Scientific discovery

Unit Nine: Freshwater Field Trip—“Look Closely”
Activity #1 Field Trip
Science:
A-12 Biological diversity
A-14 Living things and their environments
B-3 Understand that scientific inquiry involves multiple paths
C-5 Collaboration
C-6 Scientific discovery
Activity #2 Initial Exploration-Arrival Fun

Science:
A-12 Biological diversity
A-14 Living things and their environments
B-3 Understand that scientific inquiry involves multiple paths
C-5 Collaboration
C-6 Scientific discovery

Activity #3 Observation

Science:
A-12 Biological diversity
A-14 Living things and their environments
B-3 Understand that scientific inquiry involves multiple paths
C-5 Collaboration
C-6 Scientific discovery

Activity #4 Structured Activities

Science:
A-12 Biological diversity
A-14 Living things and their environments
A-15 Using local knowledge
B-2 Tools of scientific investigation

Activity #5 Reports and Class Experiments

Language Arts:
A-3 Demonstrate speaking skills

Science:
A-12 Biological diversity
A-14 Living things and their environments
A-15 Using local knowledge
B-2 Tools of scientific investigation

Activity #6 Mark & Recapture

Science:
A-12 Biological diversity
A-14 Living things and their environments
A-15 Using local knowledge
B-2 Tools of scientific investigation

Activity #7 Predator-Prey Game

Science:
A-12 Biological diversity
A-14 Living things and their environments
A-15 Using local knowledge
B-2 Tools of scientific investigation
C-5 Collaboration

Activity #8 Water Strider Race

Science:
A-12 Biological diversity
A-14 Living things and their environments
B-3 Understand that scientific inquiry involves multiple paths

Math:
A-3 Arithmetic and computation

Activity #9 On-Site Review

Language Arts:
A-3 Demonstrate speaking skills

Unit Ten: Field Trip Follow-Up & Review Activities

Activity #1 Create a Habitat-Bubble Room or “Magic Submarine”

Science:
A-12 Biological diversity
A-14 Living things and their environments
A-15 Using local knowledge
B-2 Tools of scientific investigation
C-5 Collaboration

Arts:
A-1 Participate in the arts
A-4 Demonstrate creativity

Activity #2 Sand Painting AND Activity #3 Shell Mobile

A-1 Participate in the arts
A-3 Materials, tools, techniques, and processes
A-4 Demonstrate creativity

Activity #4 Descriptive Words

Language Arts:
B-1 Meaning from written, oral, and visual information

Science:
A-15 Using local knowledge

Arts:
A-1 Participate in the arts
A-4 Demonstrate creativity
Activity #5 Water Stories
Language Arts:
A-1 Effective writing
A-2 Writing conventions
D-1-A Personal experience and prior knowledge

Activity #6 Sharing Poetry
Language Arts:
A-1 Effective writing
A-2 Writing conventions
D-1-A Personal experience and prior knowledge

Activity #7 Cinquain Poetry
Language Arts:
A-1 Effective writing
A-2 Writing conventions
D-1-A Personal experience and prior knowledge
E-4 Recognize different culture’s communication styles

Activity #8 Water Creature Poetry
B-1 Meaning from written, oral, and visual information

Activity #9 Thank You Letters
Language Arts:
A-1 Effective writing
A-2 Writing conventions

Activity #10 “There Was a Young Raven” Food Chain
Language Arts:
A-4 Writing and speaking with purpose
Science:
A-12 Biological diversity
A-14 Living things and their environments
A-15 Using local knowledge

Activity #11 Food Chain
Science:
A-12 Biological diversity
A-14 Living things and their environments
A-15 Using local knowledge
C-5 Collaboration

Activity #12 To Catch a Fish—Predator/Prey Relationships
Science:
A-12 Biological diversity
A-14 Living things and their environments
A-15 Using local knowledge
C-5 Collaboration

Activity #13 Insect & Mollusk Review
Science:
A-12 Biological diversity
A-14 Living things and their environments
A-15 Using local knowledge
C-5 Collaboration

Activity #14 Shell Treasure Hunt
Science:
A-12 Biological diversity
A-14 Living things and their environments
A-15 Using local knowledge
C-5 Collaboration
C-6 Scientific discovery

Activity #15 Classroom Activities with Live Insects
Science:
A-12 Biological diversity
A-14 Living things and their environments
A-15 Using local knowledge
B-3 Understand that scientific inquiry involves multiple paths
C-2 Knowledge through experimentation
C-3 Cultural influences
C-5 Collaboration
C-6 Scientific discovery

Activity #16 Create a Pond
Science:
A-12 Biological diversity
A-14 Living things and their environments
A-15 Using local knowledge
C-2 Knowledge through experimentation
C-3 Cultural influences
C-5 Collaboration
C-6 Scientific discovery