

TABLE OF CONTENTS AND LESSON SUMMARIES

LESSON 1 TOUR OF DEI - DEI's history and current projects, including the Clam Project

Key Words and Phrases as references for upcoming lessons

Worksheets: Web Introduction to DEI; My Research Notes about___; Umbrella Chart- At DEI I Learned That; Summary of Published Research

LESSON 2 Prep to Place the Clams (Clam Project Part 1 of 4) – Getting ready for the field-based project

Key Words and Phrases; Answers to Key Questions

Worksheets: KWHL Chart; Measurements Chart; Response to Hypothesis

LESSON 3 Placing the Clams (Clam Project Part 2 of 4)- Placing the clam containers at the high, middle and low tidal zones

Key Words and Phrases; Answers to Key Questions

Worksheets: Powers of Observation; Response to Hypothesis; container placement charts

LESSON 4 Retrieving the Clams (Clam Project Part 3 of 4)-Gathering up the clam containers after several months have passed

Key Words and Phrases; Answers to Key Questions

Worksheet: Umbrella Chart-Today I Learned That

LESSON 5 Recording, Compiling, and Analyzing the Data Collected from the Clam Field Experiment (Clam Project Part 4 of 4)

Key Words and Phrases; Answers to Key Questions

Worksheets: continue on KWHL Chart; Tide Blocks Chart; Soft-shell Ecology Project Sheet; Puzzle It Out Activity Sheet

LESSON 6 Predators of *Mya arenaria*- Learning about the common predators of the soft shell clam

Key Words and Phrases; Answers to Key Questions

Worksheets: Predators (Cards- 2 pages); Answer Key; Spider Chart for Predators; Large Predator Cards

Reading Resource: Attachment D

LESSON 7 Clam-O (game)-Using the vocabulary from the curriculum

TABLE OF CONTENTS AND LESSON SUMMARIES

Worksheets: Clam-O cards; Clam-O markers; Vocabulary list and definitions; Alphabetical Word List

LESSON 8 Cast a Clam to the Wind-Reading about a childhood memory of a local tradition-throwing clamshells, then trying it out

Key Words and Phrases; Answers to Key Questions

Reading Resource: . . . how to make a clam shell fly . . .

LESSON 9 Clam: It's a Shore Thing – Field trip to the flat (Part 1 of 3)- Taking a trip to the Habitat

Key Words and Phrases; Answers to Key Questions

LESSON 10 Clam: It's a Shore Thing – Life cycle of *Mya arenaria* (Part 2 of 3)- Learning about the life stages of the soft shell clam

Key Words and Phrases; Answers to Key Questions

Worksheets: Work List; Life Cycle Chart (completed); pictures of clam life cycle stages (3 pages); blank Life Cycle Chart

Resource: completed diagram of life cycle (black and white)

LESSON 11 Clam: It's a Shore Thing – Internal Anatomy of *Mya arenaria* (Part 3 of 3)- Learning about the digestive system and some of the other internal anatomy of the soft shell clam

Key Words and Phrases; Answers to Key Questions

Worksheets: Soft-Shell Clam; colored internal clam and shell diagram; Clam Feeding and Digestion; Answer Key to Clam Feeding and Digestion; Clam Pillow Label List;

Resources: Gulf of Maine Teachers; Guide; BIODIDAC diagrams

LESSON 12 The Chain of Command – Studying the Food Chain and Food Web and pretending to be a part of a food web in a classroom activity

Key Words and Phrases; Answers to Key Questions

Worksheets: Information needed for species cards; Species List

LESSON 13 The Shore Thing – A Marine Habitat Study (Part 1 of 4) – Field Trip- Learning to appreciate the marine habitat(s) in the local area using a series of short activities to heighten awareness

Key Words and Phrases; Answers to Key Questions

Worksheets: Scavenger Hunt

Resources: Lesson 13 Notes on Habitats; Clam Habitat (Facts and Information)

TABLE OF CONTENTS AND LESSON SUMMARIES

[Sea Vs. Land as a Habitat for Lesson 13-16; Biotic Factors that Affect a Habitat](#)

LESSON 14 The Shore Thing - Types of Habitats (Part 2 of 4); Focuses on the Marine habitats of Downeast Maine

[Key Words and Phrases; Answers to Key Questions](#)

[Worksheet: Rocky Shore Habitat](#)

Resources: [Lesson 13 Notes on Habitats; Clam Habitat \(Facts and Information\)](#)

[Sea Vs. Land as a Habitat for Lesson 13-16; Biotic Factors that Affect a Habitat](#)

LESSON 15 The Shore Thing - Time and Tides (Part 3 of 4); Introduces a mixture of topics including tides, weather stations, and moon phases

[Key Words and Phrases; Answers to Key Questions](#)

[Worksheet: Highs and Lows](#)

Resources: [Lesson 13 Notes on Habitats; Clam Habitat \(Facts and Information\)](#)

[Sea Vs. Land as a Habitat for Lesson 13-16; Biotic Factors that Affect a Habitat](#)

LESSON 16 The Shore Thing - Bringing the Outside Inside (part 4 of 4)- Depicts the coastal area for people who do not live nearby

UNDER CONSTRUCTION

Resources: [Lesson 13 Notes on Habitats; Clam Habitat \(Facts and Information\)](#)

[Sea Vs. Land as a Habitat for Lesson 13-16; Biotic Factors that Affect a Habitat](#)

LESSON 17 Core Sampling –Illustrates how to take a core sample of a tidal flat; introduces the uses of sampling

[Worksheet: UNDER CONSTRUCTION](#)

LESSON 18 Quadrat Count-Illustrates how to take a quadrat count; introduces the uses of counting

[Worksheet: Quadrat Count](#)

LESSON 19 Summary of Science Research – Uses the published information from DEI research

UNDER CONSTRUCTION

LESSON 20 Intertidal Plants & Animals- Gives more in depth information about the flora and fauna found in the marine habitat

TABLE OF CONTENTS AND LESSON SUMMARIES

UNDER CONSTRUCTION

LESSON 21 Words, Words, Words (Vocabulary Activities Series) – Compiles several activities for vocabulary of the marine environment

UNDER CONSTRUCTION

Worksheets: Vocabulary list and definitions; Alphabetical Word List

OTHER RESOURCES

Answer keys to all Lessons

Alphabetical Word List

Vocabulary Word list and Definitions

Species List (Under construction)

Book list for Student Reading