

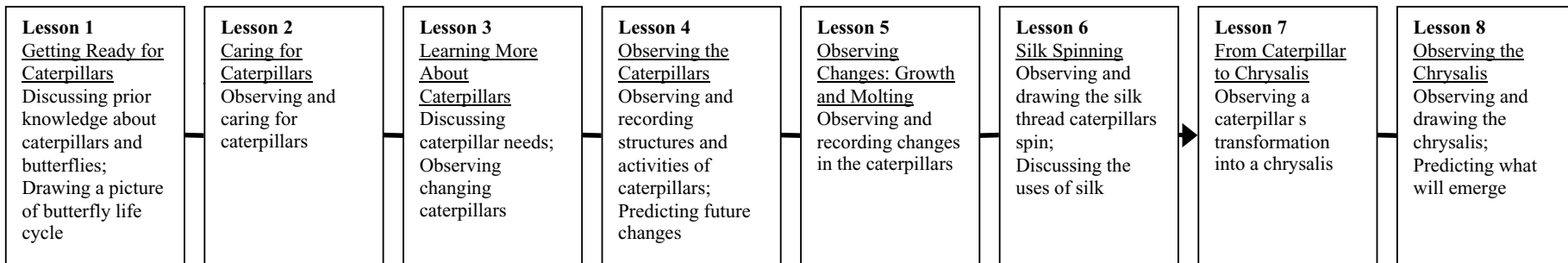
## Life Cycle of Butterflies Storyline STC Second Grade

**Unifying Concept:** Evidence, Models, and Explanation; Constancy, Change, and Measurement; Form and Function

**Big Idea:** All organisms have a life cycle. Each cycle stage has special characteristics and needs.

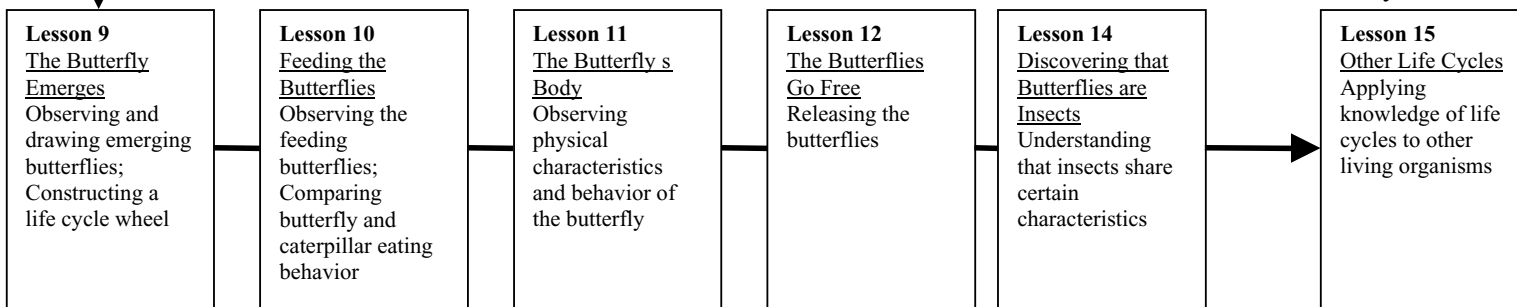
**Sub Concept I:** The caterpillar is the larval stage in the butterfly s life cycle.

**Sub Concept II:** The chrysalis is the pupal stage of the butterfly s life cycle.



**Sub Concept III:** The adult butterfly has unique physical characteristics and needs.

**Sub Concept IV:** All living things have life cycles.



**Description of Assessment:** L7 draw a caterpillar, L13 using our data, end-of-unit assessment, review of student work (e.g. science notebook)

**Science Process Skills:** Observing, Questioning, Comparing, Communicating, Predicting, and Applying

**National Science Standards:** K-4 Life Science; Science & Technology; Science in Personal and Social Perspectives; History & Nature of Science; Science as Inquiry

**California Science Standards:** 2: Life Science 2a-d

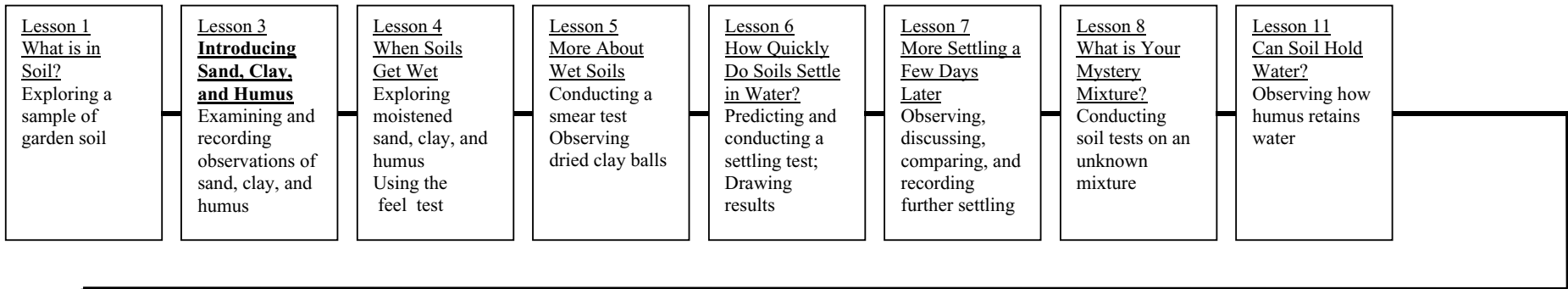
# Soils *Storyline*

## STC Second Grade

**Unifying Concept:** Systems, Order, and Organization; Evidence, Models, and Explanation; Constancy, Change, and Measurement; Form and Function

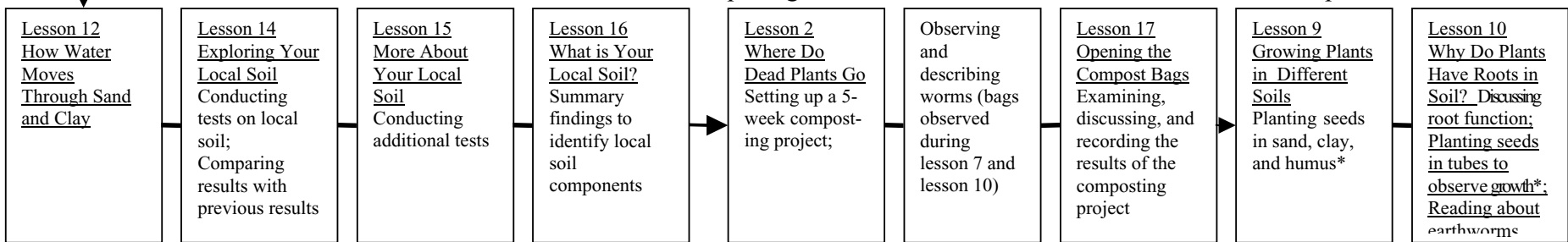
**Big Idea:** Soil is made up of different components each of which has unique identifiable properties. Many factors, including type of soil, affect plant growth.

**Sub Concept I:** Soil components have unique properties that can be identified using simple tests.



**Sub Concept II:** Over time, dead plants and other organic material affect plant growth.

**Sub Concept III:** Many factors, including soil, become part of soil.



**Description of Assessment:** Pre-unit lists (Lesson 1), post-unit: revisit lists from Lesson 1, additional assessments suggested at end of guide; review of student work (e.g. science notebook)

**Science Process Skills:** Observing, Questioning, Comparing, Communicating, Predicting, and Inferring

**National Science Standards:** K-4 Life Science; Earth/Space Science; Physical Science; Science & Technology; History and Nature of Science; Science as Inquiry

**California Science Standards:** 2: Earth Science 3c; Investigation and Experimentation 4b

VIPS 2000

# Sink or Float Storyline

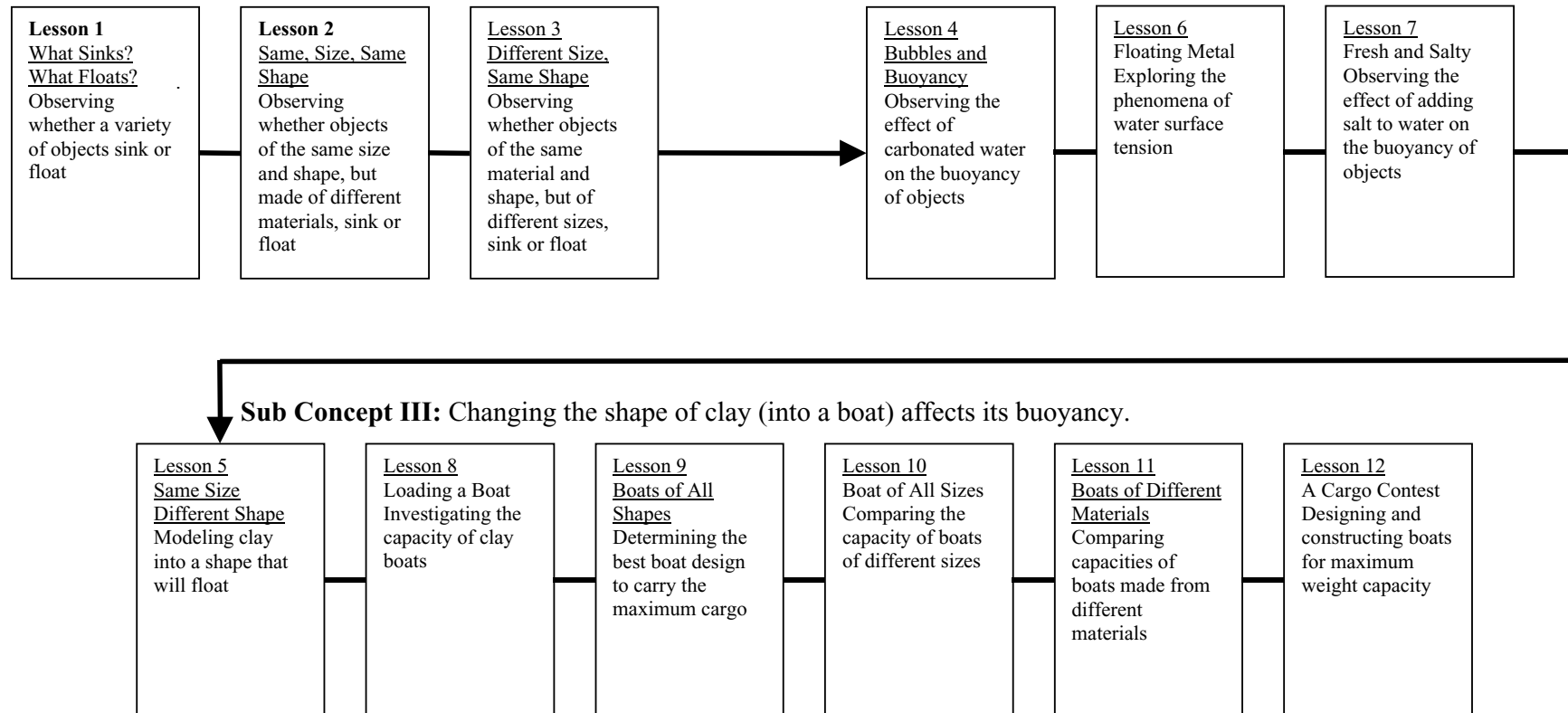
## Delta Second Grade

**Unifying Concept:** Evidence, Models, and Explanation; Constancy, Change, and Measurement; Form and Function

**Big Idea:** Buoyancy is both the tendency of an object to float in a liquid as well as the upward force a liquid exerts on an object placed in it.

**Sub Concept I:** The type of material an object is made of is one of the factors that determines whether it will sink or float.

**Sub Concept II:** Different liquids have different degrees of buoyancy.



**Sub Concept III:** Changing the shape of clay (into a boat) affects its buoyancy.

**Description of Assessment:** End-of-unit assessment, hands-on task, picture interpretation, and verbal question; review of student work (e.g. science notebook)

**Science Process Skills:** Observing, Questioning, Comparing, Communicating, Predicting, and Applying

**National Science Standards:** K-4 Physical Science; Science & Technology; History & Nature of Science; Science as Inquiry

**California Science Standards:** 2: Physical Science 1a, b; Investigation and Experimentation 4a, c, d, g

VIPS 2000

## Growing Things Storyline\*

*Insights Second Grade*

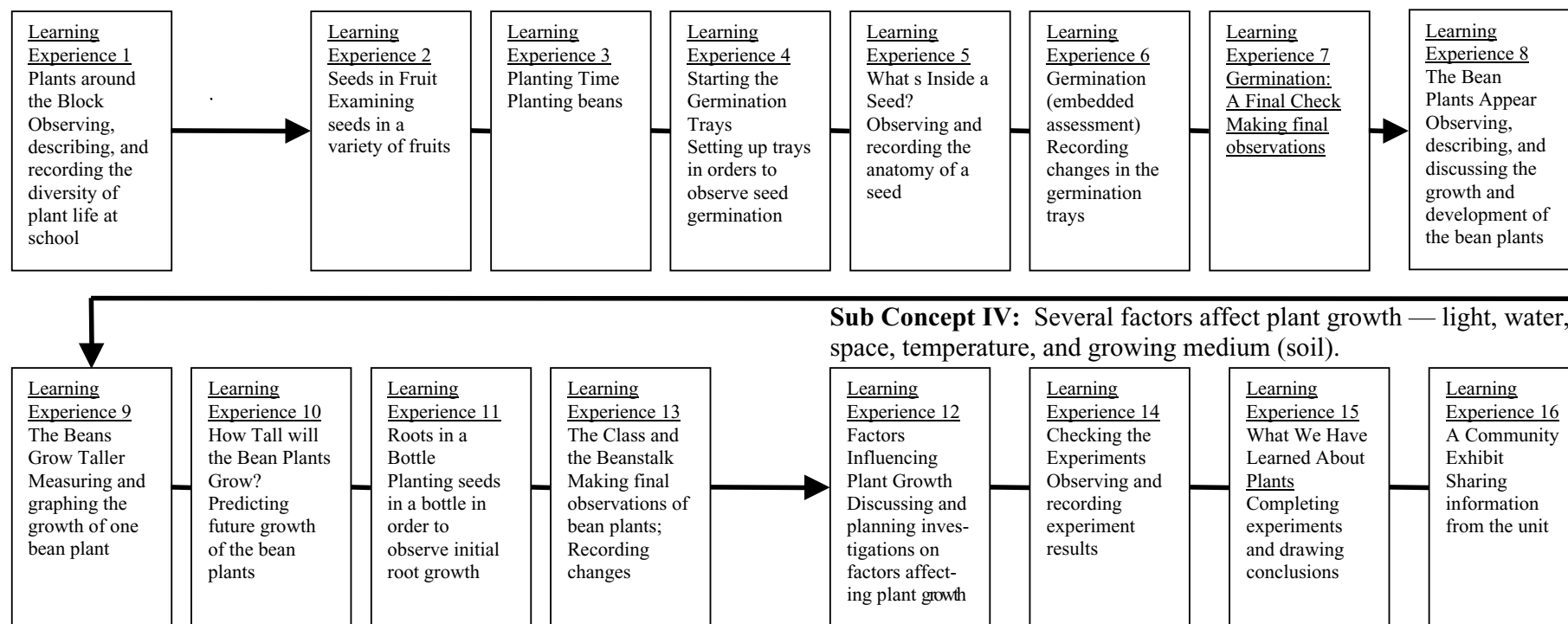
**Unifying Concept:** Systems, Order, and Organization; Evidence, Models, and Explanation; Constancy, Change, and Measurement; Form and Function

**Big Idea:** All plants have a life cycle. Each part of a plant plays a special role in its development.

**Sub Concept I:** There is diversity of a plant life all around us.

**Sub Concept II:** Seeds are the part of the flowering plant that can grow into new plants.

**Sub Concept III:** The bean plant changes as it grows.



**Sub Concept IV:** Several factors affect plant growth — light, water, space, temperature, and growing medium (soil).

**Description of Assessment:** Introductory questionnaire, embedded assessment (LE6) germination, final assessment and final questionnaire, review of student work (e.g. science notebook)

**Science Process Skills:** Observing, Questioning, Comparing, Communicating, Predicting, and Inferring

**National Science Standards:** K-4 Life Science; History and Nature of Science; Science as Inquiry

**California Science Standards:** 2: Life Science 2 a, e, f; Investigation and Experimentation 4a-g

\*optional VIPS 2000