

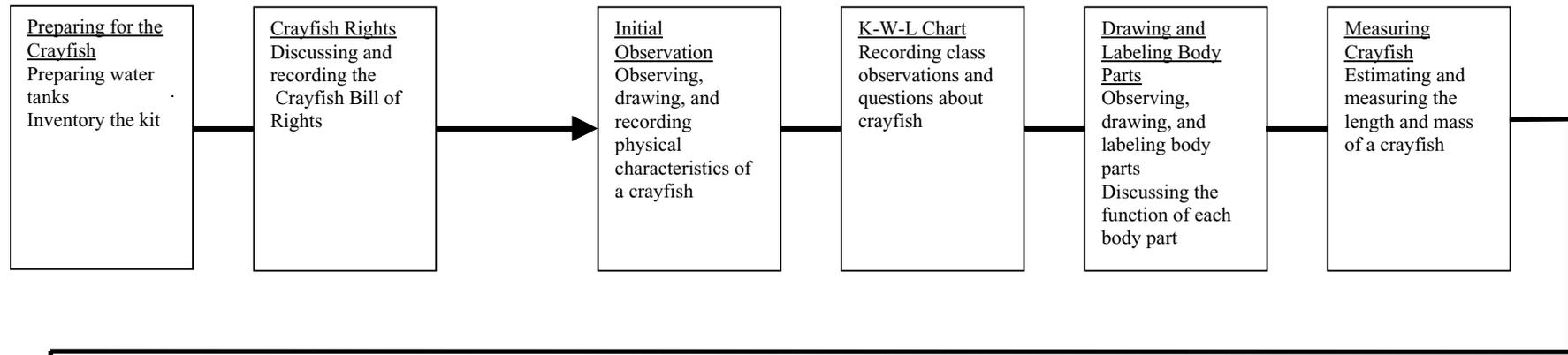
Crayfish Storyline* Fifth Grade

Unifying Concept: Systems, Order, Organization; Evidence, Models, and Explanation; Evolution and Equilibrium; Form and Function

Big Idea: All organisms have a life cycle. Organisms have special characteristics, behaviors, and adaptations that enable them to survive in their environments.

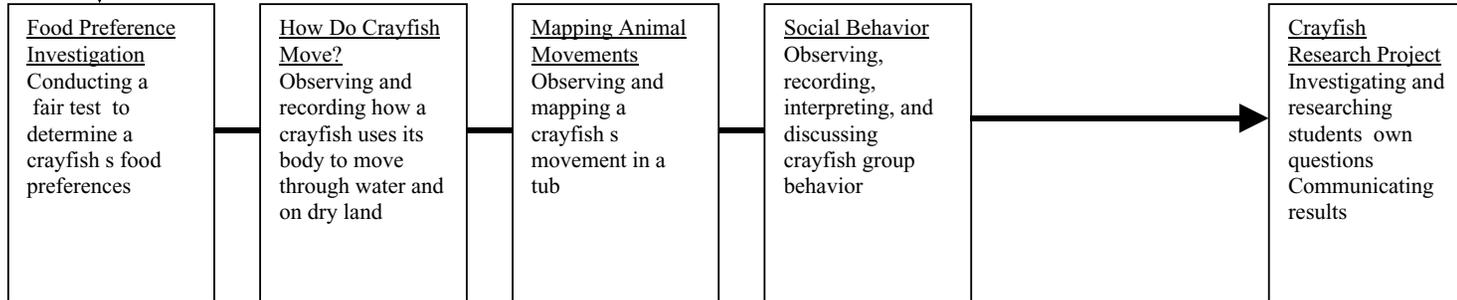
Sub Concept I: Live animals in the classroom have rights .

Sub Concept II: Each crayfish is unique, although they share the characteristics of all crustaceans.



Sub Concept III: Crayfish behavior helps them to survive in their environment.

Sub Concept IV: We can learn more about crayfish through observation, investigation, and research.



Description of Assessment: Suggestions include creating a concept map, evaluating the final research project, and evaluating other student work (e.g. science notebooks)

Science Process Skills: Observing, Questioning, Comparing, Communicating, Inferring, and Interpreting

National Science Standards: 5-8 Life Science; History & Nature of Science; Science as Inquiry

California Science Standards: 5: Investigation & Experimentation 6b-e, g-1

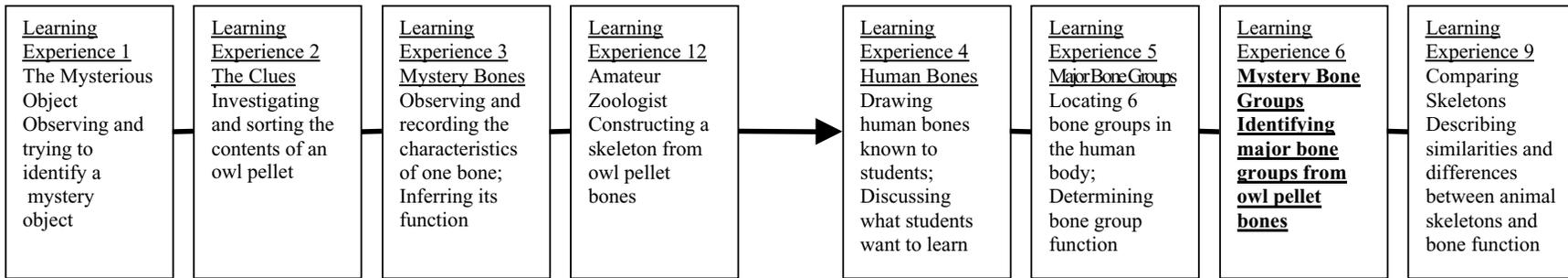
Bones & Skeletons Storyline Insights Fifth Grade

Unifying Concept: Systems, Order, and Organization; Evidence, Models, and Explanation; Form and Function

Big Idea: Bones and teeth in a skeletal system have specific structures and functions.

Sub Concept I: An owl pellet contains the bones and fur from animals an owl has eaten.

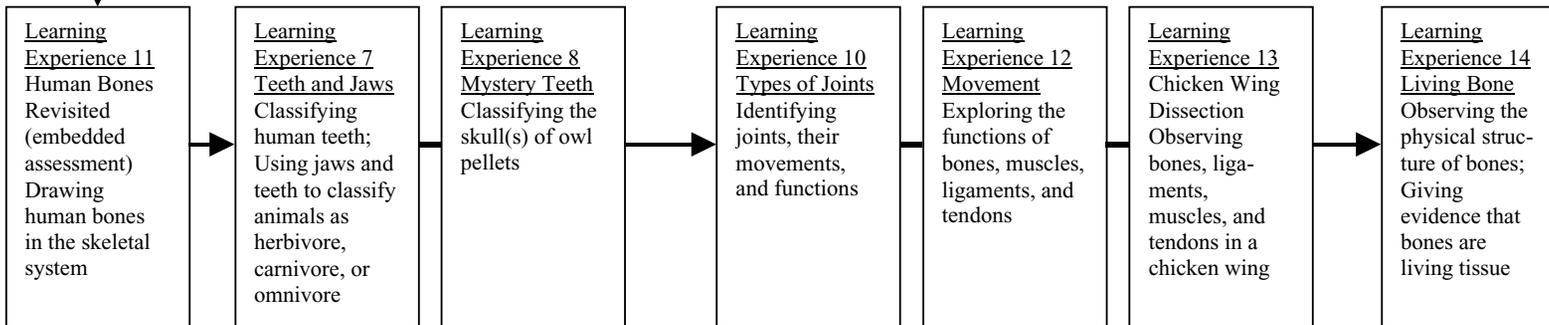
Sub Concept II: Major bone groups have specific functions.



Sub Concept III: Animal teeth and jaws indicate the kinds of food they eat.

Sub Concept IV: Joints help different parts of the body move.

Sub Concept V: Bones are living tissue.



Description of Assessment: Introductory questionnaire, embedded assessments (LE11), final assessment, final questionnaire and performance assessment, evaluating student work (e.g. science notebooks)

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

National Science Standards: 5-8 Life Science; Science in Personal and Social Perspectives; History and Nature of Science; Science as Inquiry

California Science Standards: 5: Investigation and Experimentation 6a

VIPS 2000

Solar Energy Storyline

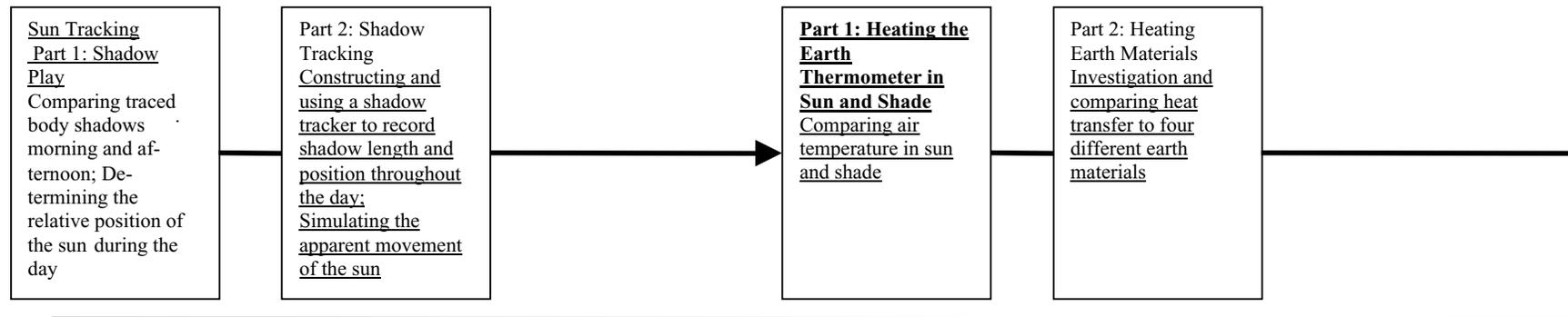
FOSS Fifth Grade

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

Big Idea: Solar energy is an alternative energy source. Solar energy can be transferred to materials. Factors influence the effectiveness of the transfer.

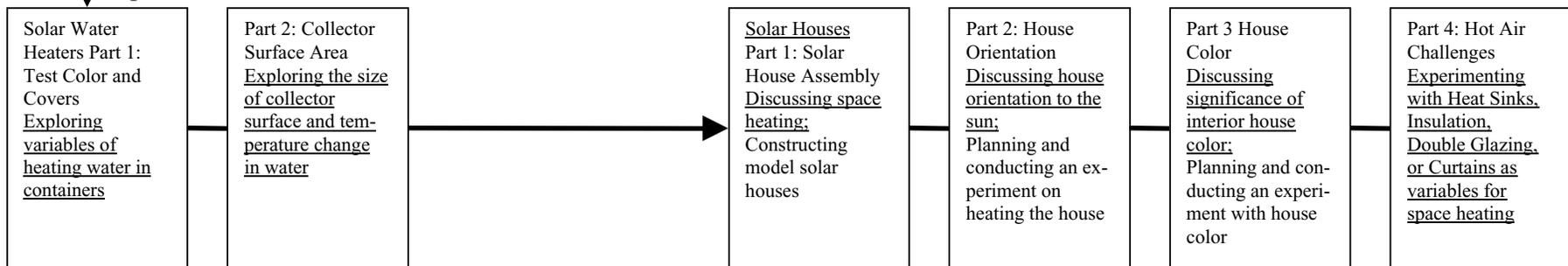
Sub Concept I: By observing shadows throughout the day, one can see the effects of the apparent motion of the sun around the earth.

Sub Concept II: The sun heats the Earth's atmosphere and earth materials.



Sub Concept III: Solar energy can be captured and used to heat water.

Sub Concept IV: Solar energy can be captured and used to heat a model house.



Description of Assessment: End-of-unit assessment includes hands-on task, pictorial assessment, and reflective questions assessment, review student work (e.g. science notebooks)

Science Process Skills: Observing, Questioning, Comparing, Communicating, Organizing, and Relating

National Science Standards: 5-8 Earth/Space Science; Physical Science; Science and Technology; Science in Personal and Social Perspectives; History & Nature of Science; Science as Inquiry

California Science Standards: 6: Physical Science 3a,d; Earth Science 4b; Investigation and Experimentation 7b-e

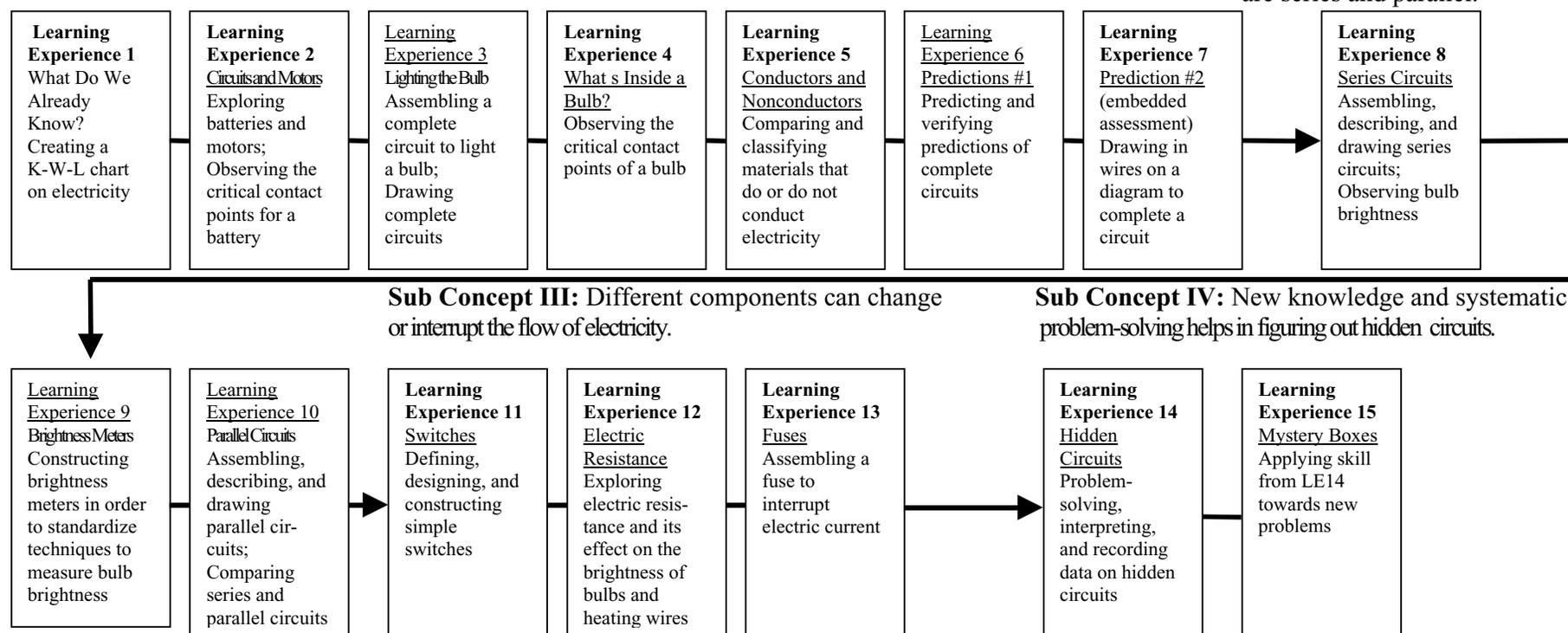
Circuits and Pathways Storyline Insights Fifth Grade

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

Big Idea: Electric current flows in a complete circuit — that is a continuous loop that connects the critical points of the battery or other power source.

Sub Concept I: A circuit is a pathway along which electric current travels.

Sub Concept II: Two examples of circuits are series and parallel.



Sub Concept III: Different components can change or interrupt the flow of electricity.

Sub Concept IV: New knowledge and systematic problem-solving helps in figuring out hidden circuits.

Description of Assessment: Introductory questionnaire, embedded assessments (LE7 and LE14), final assessment and final questionnaire and performance assessment, evaluating student work (e.g. science notebooks)

Science Process Skills: Observing, Questioning, Comparing, Communicating, Interpreting, and Applying

National Science Standards: 5-8 Physical Science; Science and Technology; Science in Personal and Social Perspectives; History and Nature of Science; Science as Inquiry

California Science Standards: 5: Investigation and Experimentation 6b

VIPS 2000

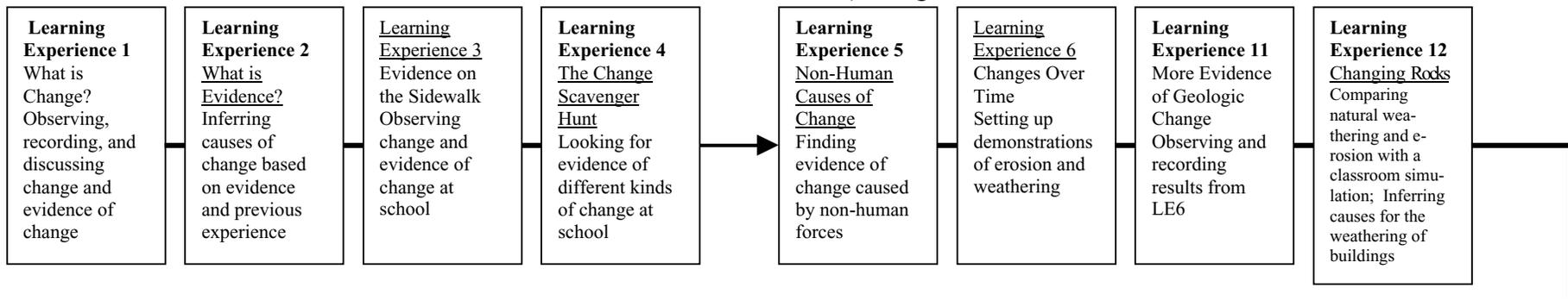
Reading the Environment Storyline* Insights Fifth Grade

Unifying Concept: Systems, Order, and Organization; Evidence, Models, and Explanation; Constancy, Change, and Measurement; Evolution and Equilibrium

Big Idea: Our world is constantly changing. Our ability to recognize these changes and understand what causes them can provide us with valuable information about our environment.

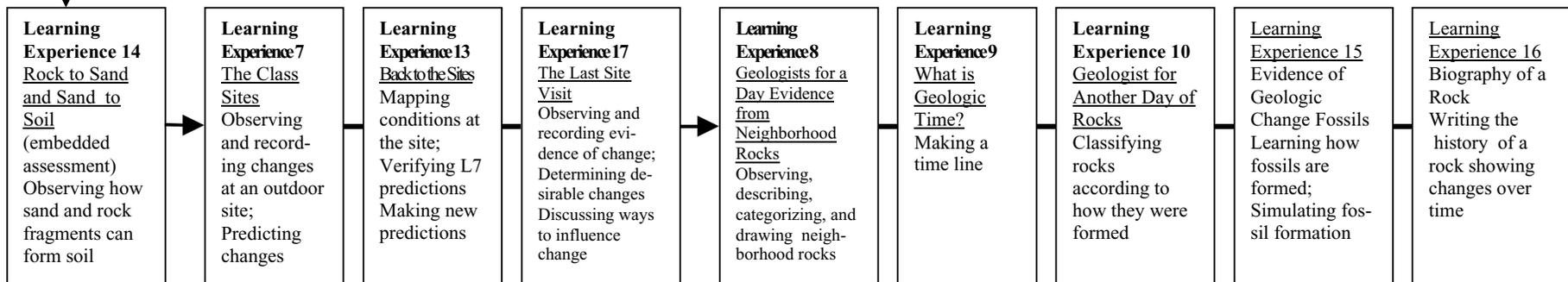
Sub Concept I: Change is a constant process.

Sub Concept II: Weathering and erosion are agents of natural (non-human) changes.



Sub Concept III: We can observe changes over time.

Sub Concept IV: Geologic change over time can result in the formation of minerals, rocks, and fossils.



Description of Assessment: Introductory questionnaire, embedded assessment (LE14), final assessment: final questionnaire and performance assessment, evaluating student work (e.g. science notebook)

Science Process Skills: Observing, Questioning, Comparing, Communicating, Inferring, and Categorizing

National Science Standards: 5-8 Earth/Space Science; Physical Science; Science in Personal and Social Perspectives; History and Nature of Science; Science as Inquiry

California Science Standards: 5: Investigation and Experimentation 6a

*optional VIPS 2000