

Sample Body of Evidence

Science

Grade K – Third Reporting Period

FOSS California Animals Two By Two Life Science/Investigation & Experimentation

This sample is intended to demonstrate the essential elements of a body of evidence. The evidence includes:

- Expected Student Responses to Grade Level Prompts (Science Notebook Sheets) identified in the Recommended Body of Evidence

This sample includes Expected Student Responses on Student Notebook Sheets identified in the Recommended Body of Evidence. This sample will be replaced with San Diego Unified School District proficient student work when it becomes available.

Important Note:

For the first two grading periods, students are evaluated based upon their progress toward end-of-year standards. Students who receive a mark of “proficient” for the first and second grading periods are making consistent and adequate progress toward achieving end-of-year expectations. In the final reporting period, the report card marks reflect a student’s actual achievement of the cumulated skills, strategies, and concepts identified in the California frameworks and content standards (SBRC, 2007).

**Standards Based Report Card
Science Marking Worksheet – Third Reporting Period
Kindergarten**

Student: _____

Strand	Evidence	Notes on Quality	Report Card Mark
<p>LIFE SCIENCE</p> <p>Different types of plants and animals inhabit the earth.</p>		<p><u>Academic Language</u> Eyes, fins, mouth, tail, gills, above, behind, below, in front of, next to, through, tunnel, air hole, backward, snail, tentacle, upside down, bristle, night crawler, smooth, flatter, jagged, moisture, isopods</p>	
	<p><u>Prompt #1</u> Fish Outline—No. 2—Student Sheet No. 23 Science Notebook What are the parts of the goldfish?</p>	<p><u>Scientific Concept</u> "Goldfish have two eyes, one tail, six fins, one mouth, gills and scales.</p>	Advanced
	<p><u>Prompt #2</u> TG pp 63-64 Steps 12-14 A FISH OUT OF WATER</p>	<p>Correctly and accurately reviews the events of a story and discusses which were real and/or made-up.</p>	Proficient
	<p><u>Prompt #3</u> TG p. 74 Step 6 No. 23 Science Notebook How are guppies and goldfish different? How are they the same?</p>	<p>Describes how guppies and goldfish bodies are different. Generalizes similarities of the fish: both swim, need water and food, and have fins, eyes, mouth, scales, and tail.</p>	Basic
	<p><u>Prompt #4</u> Land Snail Outline—No. 9—Student Sheet No. 23 Science Notebook What are the parts of the land snail?</p>	<p>Describes and identifies body parts and behavior of land snails: "have eyes on tentacles, a foot, shell, mouth, air hole.</p>	Not Assessed
	<p><u>Prompt #5</u> TG p. 104 Step 10 No. 23 Science Notebook How are land snails and water snails different? How are they the same?</p>	<p>Describes how land and water snails' bodies are different: "land snail has 4 tentacles, is big and has a round shell; water snail has 2 tentacles, is little and has a pointed shell." Generalizes similarities of the fish: both need water, eat plants, have shells and have one foot."</p>	
<p><u>Prompt #6</u> TG p. 137 Step 8 No. 23 Science Notebook How are red worms and night crawlers different? How are they the same?</p>	<p>Describes how red worms and night crawlers are different: "red worms are small, smooth and red-brown; night crawlers are big, rough below and brown." Generalizes similarities of the worms: both need water and food, have segments, wiggle forward, have a head end and a tail end."</p>		

	<p><u>Prompt #7</u> TG p. 158 Step 8 No. 23 Science Notebook How are pill bugs and sow bugs different? How are they the same?</p> <p><u>Prompt #8</u> 168 TG p. 168 Step 8 No. 23 Science Notebook What do our animals need to live?</p>	<p>Describes how the pill bug and sow bug are different: "pill bug is rounder, rolls up, has long antennae, and a tail; sow bug is flatter and turns over." Generalizes similarities of the isopods: both have a hard carapace; 14 legs, need moisture, eat potato or carrot."</p> <p>Generalizes the needs of the animals in their terrarium: water, plants for food, air, and space.</p>	
<p>INVESTIGATION & EXPERIMENTATION</p> <p>Scientific progress is made by asking meaningful questions and conducting careful investigations.</p>	<p><u>Prompt #1</u> <u>Prompt #4</u></p> <p><u>Prompt #s 3,5,6 and 7</u></p> <p><u>Prompt #5</u> <u>Prompt #8</u></p>	<p><u>Data Collection</u> Observes, accurately locates, and communicates in drawing, orally, or writing: goldfish and snail structures, and describes their attributes.</p> <p>Compares and sorts physical attributes of fish, snails, worms, and isopods.</p> <p><u>Use of Data</u> Uses a reference point to describe relative position of the snail and its ability to move only forward and travel while upside down or sideways.</p>	<p>Advanced</p> <p>Proficient</p> <p>Basic</p> <p>Below Basic</p> <p>Not Assessed</p>

SCIENCE NOTEBOOK QUESTIONS

Make a copy of this page for each student. Cut off the questions as needed. Tape them to the top of the notebook page that each student has chosen.

Prompt
#1

Inv.1 Pt.1 What are the parts of the goldfish?

Inv.1 Pt.2 What do goldfish need to live?

Inv.1 Pt.3 What do fish do?

Prompt
#3

Inv.1 Pt.4 How are guppies and goldfish different?
How are they the same?

Inv.2 Pt.1 What are the parts of the land snail?

Inv.2 Pt.2 How did you help the snail move?

Prompt
#5

Inv.2 Pt.3 How are land snails and water snails different?
How are they the same?

Inv.2 Pt.4 How did you sort shells?

Inv.3 Pt.1 What are the parts of the worm?

Inv.3 Pt.2 What do worms do?

Prompt
#6

Inv.3 Pt.3 How are red worms and night crawlers different?
How are they the same?

Inv.4 Pt.1 What are isopods?

Prompt
#7

Inv.4 Pt.2 How are pill bugs and sow bugs different?
How are they the same?

Inv.4 Pt.3 How did you help your isopod move?

Prompt
#8

Inv.4 Pt.4 What do our animals need to live?

Prompt #1



FOSS

INVESTIGATION 1: GOLDFISH AND GUPPIES

3. GUIDE OBSERVATIONS AND DISCUSSIONS

At the center, let students observe the goldfish for a few minutes without a lot of guidance. As a general rule, they should not put their hands in the water, but if they do, it shouldn't hurt the fish. Once the initial excitement has worn off, guide students to make observations.

- *Can you tell which end is the head and which is the tail?*
- *Can you see the body? Eyes? Fins? Mouth? Tail? Gills?*
- *How many fins does each fish have? Where are they?*
- *Do all the fish look the same? How are they alike? How are they different?*
- *Why do you think some are smaller than others?*

4. ADD TO THE WORD BANK

As students offer their observations, add any new or important vocabulary to the class word bank. Let students be the guides—acknowledge the words they use and offer new vocabulary as needed.

5. RECORD OBSERVATIONS

Give each student a copy of the *Fish Outline* sheet to draw the goldfish structures they observe, such as eyes, fins, and tail. Have them dictate a sentence for the bottom of the sheet or direct them to choose words to add from the class word bank. These labeled drawings can go in their science notebooks.



READ A FICTIONAL ANIMAL STORY

12. PREPARE TO READ A FISH OUT OF WATER

Students have had many experiences with real fish and will derive great enjoyment from a story such as *A Fish Out of Water* by Helen Palmer. It introduces the idea that books sometimes give animals attributes they don't really have.

Students have observed goldfish structure and feeding behavior. They have discussed the feeding needs of goldfish and heard that it may harm the fish to put too much fish food in the water. This story presents a fanciful theory for what happens if a goldfish is overfed, and sets the stage for a discussion of fiction versus nonfiction.

Ask students to share their observations of goldfish behavior.

- *What happens when you feed the goldfish?*
- *How do the goldfish act?*
- *How much food should you give the goldfish?*
- *What will happen if the goldfish are overfed?*

13. INTRODUCE THE BOOK

Explain that the story is about a goldfish and the boy who takes care of it. Ask students to listen carefully to the story to hear what happens to the fish and to decide whether they think the story is true.

Read the story aloud. Pause to discuss key points in the story and to make predictions.

Page 5	<i>What might happen to the fish?</i>
Page 7	<i>Do our goldfish act like they want more food?</i>
Page 9	<i>What will happen next?</i>
Page 10	<i>Will a fish grow that big that fast?</i>
Pages 13, 17, 32	<i>Where will he put Otto?</i>
Page 37	<i>Does a fish need water?</i>
Page 41	<i>Where will they take Otto?</i>
Page 47	<i>Can a fish live in a swimming pool? Why not?</i>
Page 53	<i>What will Mr. Carp do?</i>
Page 60	<i>Could Mr. Carp really make Otto small again?</i>



CA STANDARD

LS2b. Students know stories sometimes give plants and animals attributes they do not really have.



INVESTIGATION 1: GOLDFISH AND GUPPIES

14. AFTER THE BOOK

Discuss the book, using these questions as a guide.

- *Is this a true story? Why do you think so?*
- *Why do writers add made-up ideas to stories?*
- *What was the story trying to tell us? [Don't overfeed goldfish.]*

Review the events in the story and discuss which were real and which were made-up. Make a chart of the events, using the example below as a guide. Discuss how students know when something is made-up and when something is real. Tell students that stories sometimes give plants and animals features and abilities they do not really have.



Real	Made-up
<p>Don't feed goldfish too much!</p> <p>Fish sometimes look like they'll eat more than they need.</p> <p>Fish need water.</p>	<p>Fish grow right before your eyes.</p> <p>Fish can live in a swimming pool.</p> <p>You can shrink a fish.</p> <p>A goldfish can grow as big as Otto.</p>



WRAPPING UP PART 4

5. REINFORCE VOCABULARY

Review key vocabulary added to the word bank earlier. One way to do this is to use the cloze review where the teacher says a sentence leaving the last word off and asks students to answer chorally. Here's an example of cloze review for this part.

T: *When we observe goldfish and guppies to see how they are the same and different, we _____*

S: Compare.

T: *The first fish we observed is called a _____*

S: Goldfish.

T: *Our new fish is called a _____*

S: Guppy.

T: *The scientific word for boy is _____*

S: Male.

T: *The scientific word for girl is _____*

S: Female.

Additional words to discuss and write on the word bank include

- color

6. MAKE CONTENT CHART ENTRIES

To summarize the comparisons that students made, draw a T-table to list differences. On a separate sheet list the similarities.

- *How are guppies and goldfish different?*
- *How are they the same?*

If you are using science notebooks, use these questions as writing/drawing prompts.

WORD BANK

color
compare
guppy
female
male

HOW FISH ARE DIFFERENT

guppies	goldfish
small	big
long	oval
one tail	forked tail
boys are spotted	boys and girls look the same

HOW FISH ARE THE SAME

- Both swim.
- Both need water and food.
- Both have fins, eyes, mouth, scales, and tail.
- Student questions?



GUIDING THE INVESTIGATION

PART 1: LAND SNAILS

1. INTRODUCE LAND SNAILS

Call students to the rug. Tell them that you have brought a new animal to class for them to observe. Give them some clues to see if they can guess its identity.

This animal has no arms or legs. It moves slowly. It carries its house on its back.

- What kind of animal is it?



Discuss proper handling of living organisms. Tell students they will get a chance to find out all they can about snails: what snails do and what body parts they have. Rotate small groups through the center, or use it as a free-choice activity.

2. DISTRIBUTE SNAILS

At the center put a snail in a plastic cup for each student. Let students observe the snails and handle them carefully.

3. OBSERVE SNAIL ACTIVITIES

After students have observed the snails unguided for several minutes, ask some questions to hone students' observations.

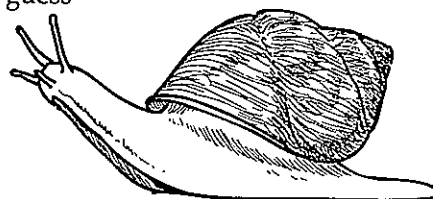
- How do snails move?
- What do snails do when you put them in a cup?
- Do snails move up? Down? Sideways?
- Can snails travel upside down? Backward?
- How does it feel when a snail moves on your hand?
- What does the snail do when you pick it up by the shell?
- How can you tell where a snail has been? [It leaves a mucus trail.]

4. ADD TO THE WORD BANK

As students offer their observations, add any new or important vocabulary to the class word bank. Let students be the guides—acknowledge the words they use and offer new vocabulary as needed.

5. MAKE A CARDBOARD FENCE

Give each student a piece of folded cardboard to use as a fence or barrier. Let the snails move across the table. Have students guess what will happen when they place their fences in the snails' paths. Then let them observe as the snails confront the barriers. Ask students to describe the location of the snail (in front of the fence, on the fence, in back of the fence).



FOCUS ON STANDARD LS2C

- Students know how to identify major structures of common plants and animals (e.g., stems, leaves, roots, arms, wings, legs)

FOCUS ON STANDARD I&E4C

- Describe the relative position of objects by using one reference (e.g., above or below)

FOCUS ON STANDARD I&E4E

- Communicate observations orally and through drawings

NOTE: Caution students to use extra care when handling the smaller snails. Their shells may be somewhat fragile.

CENTER MATERIALS:

- Plastic cups
- Cardboard strips
- Land-Snail Outline sheets (optional)
- Pencils or markers (optional)
- Paper towels
- Snails in terrarium



INVESTIGATION 2: LAND AND WATER SNAILS

NOTE: Each visit to the center should provide opportunities for students to interact with snails in a new way. You might have students look at behavior one day and structures another.

6. OBSERVE SNAIL STRUCTURES



Ask questions to motivate close observation of snail structures.

- *What does the shell look like?*
- *Do snails have heads? Tails?*
- *What do you see sticking out from the head?* [Tentacles (feelers).]
- *How many tentacles do you see?* [Four—two long and two short.]
- *What happens to the tentacles when you touch them gently?*
- *Do snails have eyes? Ears? A nose? A mouth?*
- *How do snails breathe?* [Look carefully on the underside of the snail, close to the shell. There is an *air hole* that opens and closes to let air in.]
- *Where is the foot of the snail?* [The large surface on which the snail moves.]
- *How does the foot move?* [Wavelike motions, visible when the snail moves on the surface of a cup.]

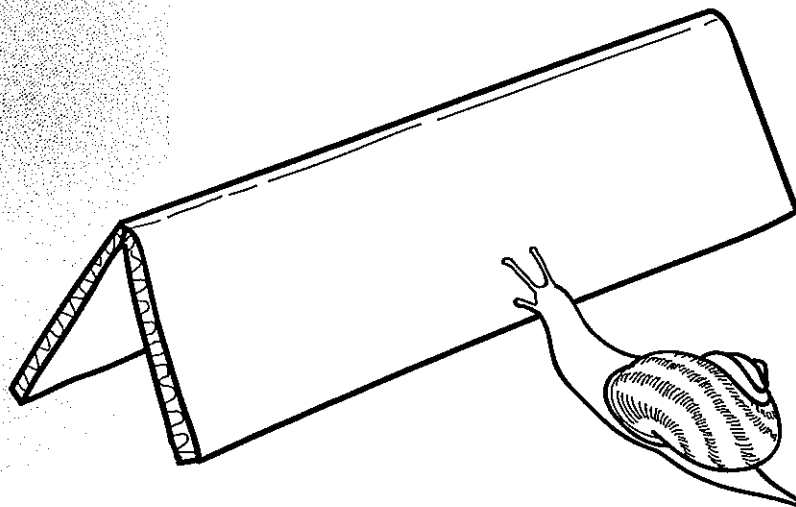
7. RECORD OBSERVATIONS (OPTIONAL)



Give each student a copy of the *Land-Snail Outline* sheet to draw the land-snail structures they observe, such as eyes, foot, and tentacles. Have them dictate a sentence for the bottom of the sheet or direct them to choose words to add from the class word bank.

8. PREPARE THE CENTER FOR THE NEXT GROUP

Have students return their land snails to the terrarium. Collect the cardboard barriers. Wipe out the cups if necessary. Have students wash off their hands.



Prompt #5



INVESTIGATION 2: LAND AND WATER SNAILS

WRAPPING UP PART 3

9. REINFORCE VOCABULARY

Review key vocabulary added to the word bank earlier. One way to do this is to use the cloze review. Here's an example of cloze review for this part.

T: *Our first snails are called _____*

S: Land snails.

T: *Our new snails are called _____*

S: Water snails.

T: *Land snails are kept in a _____*

S: Terrarium.

T: *"Terra" means _____*

S: Land.

T: *Water snails are kept in an _____*

S: Aquarium.

T: *"Aqua" means _____*

S: Water.

T: *Both types of snails have shells. That is one way they are the _____*

S: Same.

T: *Water snails live in water and land snails live on land. That is one way they are _____*

S: Different.

Additional directional words to discuss and write on the word bank include

- float
- vial

10. MAKE CONTENT CHART ENTRIES

To summarize the comparisons that students made, draw a T-table to list differences, as you did with the fish comparisons. On a separate sheet list the similarities.

- *How are water and land snails different?*
- *How are they the same?*

If you are using science notebooks, use these questions as writing or drawing prompts. Students can draw the two snails to illustrate differences. Those who are beginning to write can copy words from the word bank.

WORD BANK

- aquarium
- different
- float
- land snail
- same
- terrarium
- vial
- water snail

HOW SNAILS ARE DIFFERENT

land snail	water snail
4 tentacles	2 tentacles
big	little
round shell	pointed shell

HOW SNAILS ARE THE SAME

- Both need water.
- Both eat plants.
- Both have shells.
- Both have one foot.
- *Student questions?*



WRAPPING UP PART 3

7. REINFORCE VOCABULARY

Review key vocabulary added to the word bank earlier. Here's an example of cloze review for this part.

T: *Our new earthworm is called a _____.*

S: Night crawler.

T: *The earthworm's skin feels _____.*

S: Smooth.

Additional words to discuss and write on the word bank include

- bristle

8. MAKE CONTENT CHART ENTRIES

To summarize the comparisons that students made, draw a T-table to list differences. On a separate sheet list the similarities.

- *How are red worms and night crawlers different?*
- *How are they the same?*

If you are using science notebooks, use these questions as writing/drawing prompts.



WORD BANK

bristle
night crawler
smooth

HOW WORMS ARE DIFFERENT

red worms	night crawlers
small	big
smooth	rough below
red-brown	brown

HOW WORMS ARE THE SAME

- Both need water and food.
- Both have segments.
- Both wiggle forward.
- Both have a head end and a tail end.

• *Student questions?*

Prompt #7



FOSS

INVESTIGATION 4: PILL BUGS AND SOW BUGS

WRAPPING UP PART 2

7. REINFORCE VOCABULARY

Review key vocabulary added to the word bank earlier. One way to do this is to use the cloze review. Here's an example of cloze review for this part.

T: *We have two kinds of isopods. They are called _____*

S: Pill bugs and sow bugs.

T: *The carapace on the pill bug is _____*

S: Rounder.

T: *The carapace on the sow bug is _____*

S: Flatter.

T: *For protection, pill bugs can _____*

S: Roll up in a ball.

T: *The sow bugs have a carapace that has an edge that is _____*

S: Jagged.

Additional words to discuss and write on the word bank include

- moisture
- protect
- turn over

8. MAKE CONTENT CHART ENTRIES

To summarize the comparisons that students made, draw a T-table to list differences. On a separate sheet list the similarities.

- *How are pill bugs and sow bugs different?*
- *How are they the same?*

If you are using science notebooks, use this question as a writing/drawing prompt.

WORD BANK

flatter
jagged
moisture
pill bug
protect
roll up
rounder
sow bug
turn over

HOW ISOPODS ARE DIFFERENT

pill bug	sow bug
rounder	flatter
roll up	turn over
long antennae	
tail	

HOW ISOPODS ARE THE SAME

- Both have a hard carapace.
- Both have 14 legs.
- Both need moisture.
- Both eat potato or carrot.
- Student questions?

Prompt # 8



INVESTIGATION 4: PILL BUGS AND SOW BUGS

6. ADD OTHER ORGANISMS

Over time, students might suggest adding other locally collected plants and animals to the terrarium. Before making any additions, discuss the needs of the new organisms as well as of those already in the terrarium. Guide students in making appropriate decisions on what to add (or not add) to the terrarium.

WRAPPING UP PART 4

7. REINFORCE VOCABULARY

Review key vocabulary added to the word bank earlier. One way to do this is to use the cloze review. Here's an example of cloze review for this part.

T: *Our animals can all live together in a _____*

S: Terrarium.

T: *All of our animals need these four things to live: _____, _____, _____, and _____*

S: Air, food, water, and space.

T: *Besides the animals in our terrarium, the other living things are _____*

S: Plants.

8. MAKE CONTENT CHART ENTRIES

Add new concepts to the content chart.

- *What do all our animals need to live?*

If you are using science notebooks, use this question as a writing/drawing prompt.