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| **Investigation/Part** | **Focus Question** | **Writing Support** | **CCSS-ELA**  **NGSS** |
| Investigation 1: Part 1  The Structure of Goldfish | What are the parts of a goldfish? | Students can glue their *Fish Outline* drawings in their science notebooks and add labels or dictate a sentence. | [CCSS.ELA-Literacy.W.K.2](http://www.corestandards.org/ELA-Literacy/W/K/2/) Use a combination of drawing, dictating, and writing to compose informative/explanatory texts in which they name what they are writing about and supply some information about the topic. |
| Investigation 1: Part 2  Caring for Goldfish | What parts of the goldfish get them the things they need to live? | Have students illustrate their ideas in their science notebook. Let them tape a little fish food on their drawing of the aquarium. | * [CCSS.ELA-Literacy.W.K.8](http://www.corestandards.org/ELA-Literacy/W/K/8/) With guidance and support from adults, recall information from experiences or gather information from provided sources to answer a question. |
| Investigation 1: Part 3  Goldfish Behavior | What can we add to improve the habitat? | A cutout fish taped to the end of a sting and attached to the page can be used to show what fish do. Students can illustrate the aquarium and make additions from the word bank. | [CCSS.ELA-Literacy.W.K.8](http://www.corestandards.org/ELA-Literacy/W/K/8/) |
| Investigation 1: Part 4  Comparing Guppies to Goldfish | Do guppies and goldfish have the same parts? | Students can use the content chart for a guide or illustrate their own answers to the focus question. | [CCSS.ELA-Literacy.W.K.2](http://www.corestandards.org/ELA-Literacy/W/K/2/) |
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| Investigation 2: Part 1  Land Snails | What parts make both snails and fish animals? | Students can glue their *Land Snail Outline* drawings in their science notebooks, then add labels or dictate a sentence. | [CCSS.ELA-Literacy.W.K.8](http://www.corestandards.org/ELA-Literacy/W/K/8/) |
| Investigation 2: Part 2  Snail Races | What can we learn about snails from racing snails? | Have students illustrate their ideas. They can tape a bit of snail food (lettuce) in their science notebook to show what snails eat. A small drawing of a snail can be cut out and glued to a length of yarn, then attached to the page, to illustrate their words. | [CCSS.ELA-Literacy.W.K.2](http://www.corestandards.org/ELA-Literacy/W/K/2/) |
| Investigation 2: Part 3  Observing Water Snails | Explain how water snails can live in water, but not land snails. | Students can draw the two snails to illustrate differences. Those who are beginning to write can copy words from the class chart made during wrap-up. | [CCSS.ELA-Literacy.W.K.2](http://www.corestandards.org/ELA-Literacy/W/K/2/) |
| Investigation 2: Part 4  Shells | How many kinds of snails are there? | Draw two circles on students’ notebook pages. Inside, have students draw shells from the two groups they made. Encourage students to use the word bank to label their circles. | [CCSS.ELA-Literacy.W.K.2](http://www.corestandards.org/ELA-Literacy/W/K/2/) |
| **The video entitled *Animals* in *Writing in Science in Action* , by Betsy Rupp-Fulwieler shows a teacher using snails in a lesson modified to teach students the concept of a fair test and how to design an investigation with a class of Kindergarteners. It is an excellent example of teaching critical foundational science practices and writing.** | | | |
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| After Investigation 1 & 2 are completed. | How are all living organisms related? | After the investigations, have a class discussion using the following frame to collect students thinking:  How are fish and snails different?  Fish Snails  How are fish and snails the same?  Use the following sentence stem to model writing a sentence using the information collected.  Fish and snails both \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.  Remove the model sentence. Then have students use a blank sentence stem to complete their own sentences in their science notebooks. (Sentence stems can be printed off and glued into notebook or written in by students.) | [CCSS.ELA-Literacy.W.K.2](http://www.corestandards.org/ELA-Literacy/W/K/2/) Use a combination of drawing, dictating, and writing to compose informative/explanatory texts in which they name what they are writing about and supply some information about the topic.  [**NGSS K-LS1-1**](http://www.nextgenscience.org/kls1-molecules-organisms-structures-processes)  **Use observations to describe patterns of what plants and animals (including humans) need to survive.** |
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| Investigation 3: Part 1  Structure of Redworms | What parts get the worm food, water and air? | Students can glue their *Worm Outline* drawings into their science notebooks and add labels or dictate a sentence. | [CCSS.ELA-Literacy.W.K.2](http://www.corestandards.org/ELA-Literacy/W/K/2/) |
| Investigation 3: Part 2  Redworm Behavior | For what reasons do worms like to be wet? | Have students illustrate their ideas. They can draw a picture of a drop of water in their science notebook to show what worms do when near water. A small drawing of a worm can be cut out and glued to a length of yarn, then attached to the page, to illustrate their words. | [CCSS.ELA-Literacy.W.K.8](http://www.corestandards.org/ELA-Literacy/W/K/8/) |
| Investigation 3: Part 3  Comparing Redworms to Night Crawlers | How many kinds of worms are there? | After the investigation, have a class discussion using the following frame to collect students thinking:  How are redworms and night crawlers different?  redworms night crawlers  How are redworms and night crawlers the same?  Use the following sentence stem to model writing a sentence using the information collected.  Redworms and nightcrawlers both \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.  Remove the model sentence. Then have students use a blank sentence stem to complete their own sentences in their science notebooks. (Sentence stems can be printed off and glued into notebook or written in by students.) | [CCSS.ELA-Literacy.W.K.2](http://www.corestandards.org/ELA-Literacy/W/K/2/) |
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| Investigation 4: Part 1  Isopod Observations | What tools help us learn about isopods? | Students can draw their observations into their science notebooks and add labels or dictate a sentence. | [CCSS.ELA-Literacy.W.K.2](http://www.corestandards.org/ELA-Literacy/W/K/2/) |
| Investigation 4: Part 2  Identifying Isopods | What helps us tell pill bugs from sow bugs? | After the investigation, have a class discussion using the following frame to collect students thinking:  How are pill bugs and sow bugs different?  pill bugs sow bugs  How are pill bugs and night sow bugs the same?  Use the following sentence stem to model writing a sentence using the information collected.  Pill bugs are different than sow bugs because pill bugs \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.  Remove the model sentence. Then have students use a blank sentence stem to complete their own sentences in their science notebooks. (Sentence stems can be printed off and glued into notebook or written in by students.) | [CCSS.ELA-Literacy.W.K.2](http://www.corestandards.org/ELA-Literacy/W/K/2/) |
| Investigation 4: Part 3  Isopod Races | What would we need to see who is fastest? | Students can write predictions in their science notebooks using this stem:  I think \_\_\_\_\_\_\_\_\_\_ will be faster than \_\_\_\_\_\_\_\_\_\_\_. | [CCSS.ELA-Literacy.W.K.2](http://www.corestandards.org/ELA-Literacy/W/K/2/) |
| Investigation 4: Part 4  Animals Living Together | Can you build a habitat for all of the land animals or an aquarium for all of the water animals? | Before doing the investigation, have a class discussion involving students referring to their notebooks to contribute what they think should be in an aquarium for fish and water snails, while the teacher models drawing and labeling the aquarium. Students then draw what they think a **terrarium** should contain to sustain isopods and worms. They should label their diagram, using as many words as possible from the word wall.  Consider opportunities for the students to present their terrarium designs, by posting or with an opportunity to describe their ideas. | [CCSS.ELA-Literacy.W.K.8](http://www.corestandards.org/ELA-Literacy/W/K/8/) |
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| After Investigation 1-4 are completed. | How do living organisms interact with their environment to meet their needs? | After the investigations, have a class discussion using the following frame to collect students thinking:  **What do all the animals need to live?**  Use the following sentence stem to model writing a sentence using the information collected.  All animals need \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ to live.  Remove the model sentence. Then have students use a blank sentence stem to complete their own sentences in their science notebooks. (Sentence stems can be printed off and glued into notebook or written in by students.) | [CCSS.ELA-Literacy.W.K.2](http://www.corestandards.org/ELA-Literacy/W/K/2/)  [**NGSS K-LS1-1**](http://www.nextgenscience.org/kls1-molecules-organisms-structures-processes)  **Use observations to describe patterns of what plants and animals (including humans) need to survive.** |