#### Subjects:

• ELA/Science/Social Studies/Math

#### **Conceptual Thread:**

- Structure and function of organisms' external parts.
- Interdependence of living things in the environment.

## New Paltz Central School District Curriculum Framework

Grade: 1

### Time Frame: 8 weeks (March through May)

## **Essential Understanding/Question**

How do animals meet their basic needs? How does the environment effect how animals survive?

### Rationale

Throughout this unit of study first graders will gain a deeper understanding of the local Hudson Valley animals (birds, mammals and aquatic life) that share our environment. First graders will also create models of realistic ecosystems.

### **Statement of Student Experience**

Through carefully scaffolded learning experiences students will:

- Research a local bird, mammal or aquatic creature
- Immerse in non-fiction literature for gathering relevant information
- Write informational texts
- Map ecosystems/habitats
- Report findings by choosing a preferred format (diorama, poster, oral presentation, etc.)
- Apply computational and measurement skills within personal research
- Collaborate with peers to create fact-based models

# **Statement of Learning Outcomes**

Each first grade student will:

- Participate in the process of writing an All About Book (informational text) about an animal
- Create a map of an animal's habitat/ecosystem
- Prepare a poster, diorama, oral presentation or other to demonstrate knowledge of researched information
- Construct an accurate model of their selected animal, emphasizing structure, form and function
- Collaborate with peers to create a class island that reflects researched information and demonstrates the interdependence of living creatures

### **Critical Understandings**

- All organisms have external parts. Different animals use their body parts in different ways to see, hear, grasp objects, protect themselves, move from place to place and seek, find and take in food, water and air.
- Maps, models and diagrams serve as representations of places, physical features and objects.
- Symbols represent places and can be used to locate geographic features and physical characteristics
- Living things depend on and modify their physical environments to meet basic needs
- Learning and research is an investigative process of discovery
- Researchers find diverse ways to share their discoveries with others

## New Paltz Central School District Curriculum Framework

## **Skills and Competencies**

In addition to competencies related to specific disciplines; i.e., compare and contrast (social studies) optimization and systems thinking (science), students will develop and strengthen thinking skills and life skills (21<sup>st</sup> Century Skills).

21<sup>st</sup> Century Skills: (Include but are not limited to) Critical thinking, problem solving, analogous thinking, visualizing and representing, collaboration and cooperation including opportunities to assume a leadership learning role, research, innovation, problem identification, refining and adapting (including refining a task to optimize a solution or outcome), risk-taking (trial and error/learning from mistakes).

|            | Skills and Comp             | etencies: Humanities  |   |
|------------|-----------------------------|---|---|
| Discipline | Skill/Competency            | Alignment: Common<br>Core Learning Standard   | Level of<br>Understanding:<br>Webb's Depth of<br>Knowledge      |
| ELA        | Reading: Informational Text | <ul> <li>RI.1.1 Ask and answer<br/>questions about key<br/>details in text</li> <li>RI.1.2 Identify the main<br/>topic and retell key<br/>details of a text</li> <li>RI.1.4 Ask and answer<br/>questions to help<br/>determine or clarify the<br/>meaning of words and<br/>phrases in a text</li> <li>RI.1.5 Know and use<br/>various text features<br/>(e.g. headings, tables of<br/>contents, glossaries) to<br/>locate key facts or<br/>information in a text</li> <li>RI.1.6 Distinguish<br/>between information<br/>provided by pictures or<br/>other illustrations and<br/>information provided by<br/>the words in a text</li> </ul> | Recall<br>Understanding<br>Application<br>Analysis<br>Synthesis |

| ELA | Reading: Foundational Skills<br>• Phonics and Word<br>Recognition<br>• Fluency | RI.1.10 With prompting<br>and support, read<br>informational texts<br>appropriately complex<br>for grade 1RF.1.3 Know and apply<br>grade-level phonics and<br>word analysis skills in<br>decoding wordsRF.1.4 Read with<br>sufficient accuracy and<br>fluency to support<br>   |   |
|-----|--|--|---|
| ELA | Writing  | <ul> <li>W.1.2 Write<br/>informative/explanatory<br/>texts in which they name<br/>a topic, supply some<br/>facts about the topic,<br/>and provide some sense<br/>of closure</li> <li>W.1.5 With guidance<br/>and support from adults,<br/>focus on a topic,<br/>respond to questions<br/>and suggestions from<br/>peers, and add details to<br/>strengthen writing as<br/>needed</li> <li>W.1.6 With guidance<br/>and support from adults,<br/>use a variety of digital<br/>tools to produce and<br/>publish writing, including<br/>in collaboration with<br/>peers</li> </ul> | Recall<br>Understanding<br>Application<br>Analysis<br>Synthesis |
|     |  | <ul> <li>W.1.7 Participate in shared research and writing projects</li> <li>W.1.8 With guidance and support from adults, recall information from experiences or gather information from</li> </ul>   |   |

|     |                        | provided sources to                |  |
|-----|------------------------|------------------------------------|--|
|     |                        | answer a question                  |  |
| ELA | Speaking and Listening | SL.1.1 – SL.1.6                    |  |
|     |                        | <ul> <li>Participate in</li> </ul> |  |
|     |                        | collaborative                      |  |
|     |                        | conversations                      |  |
|     |                        | with diverse                       |  |
|     |                        | partners about                     |  |
|     |                        | grade 1 topics                     |  |
|     |                        | and texts with                     |  |
|     |                        | peers and adults                   |  |
|     |                        | in small and                       |  |
|     |                        | larger groups                      |  |
|     |                        | Ask and answer                     |  |
|     |                        | questions about                    |  |
|     |                        | key details in a                   |  |
|     |                        | text read aloud                    |  |
|     |                        | or information                     |  |
|     |                        | presented orally                   |  |
|     |                        | or through other                   |  |
|     |                        | media                              |  |
|     |                        | Ask and answer                     |  |
|     |                        | questions about                    |  |
|     |                        | what a speaker                     |  |
|     |                        | says in order to                   |  |
|     |                        | gather                             |  |
|     |                        | additional                         |  |
|     |                        | information or                     |  |
|     |                        | clarify                            |  |
|     |                        | something that                     |  |
|     |                        | is not                             |  |
|     |                        | understood                         |  |
|     |                        |                                    |  |
|     |                        | Describe people,                   |  |
|     |                        | places, things,                    |  |
|     |                        | and events with                    |  |
|     |                        | relevant details,                  |  |
|     |                        | expressing ideas                   |  |
|     |                        | and feelings                       |  |
|     |                        | clearly                            |  |
|     |                        | Add drawings or                    |  |
|     |                        | other visual                       |  |
|     |                        | displays to                        |  |
|     |                        | descriptions                       |  |
|     |                        | when                               |  |
|     |                        | appropriate to                     |  |
|     |                        | clarify ideas,                     |  |

|            |                                | thoughts, and           |                |
|------------|--------------------------------|-------------------------|----------------|
|            |                                | feelings                |                |
|            |                                | Produce                 |                |
|            |                                | complete                |                |
|            |                                | sentences when          |                |
|            |                                | appropriate to          |                |
|            |                                | task and                |                |
|            |                                | situation               |                |
|            |                                |                         |                |
|            | Skills and Competencies: STEAN | ithematics)             | ering, Art,    |
| Discipline | Skill/Competency               | Alignment: Common       | Level of       |
| Discipline | Skilly competency              | Core Learning Standard  | Understanding: |
|            |                                | Core Learning Standard  | -              |
|            |                                |                         | Webb's Depth   |
|            |                                |                         | of Knowledge   |
| Science    | Structure, Function, and       | Next Generation Science | Recall         |
|            | Information Processing         | Standard:               | Understanding  |
|            |                                | LS1.A: Structure and    | Application    |
|            |                                | Function                | Analysis       |
|            |                                | All organisms           | Synthesis      |
|            |                                | have external           |                |
|            |                                | parts. Different        |                |
|            |                                | animals use their       |                |
|            |                                | body parts in           |                |
|            |                                |                         |                |
|            |                                | different ways to       |                |
|            |                                | see, hear, grasp        |                |
|            |                                | objects, move           |                |
|            |                                | from place to           |                |
|            |                                | place, and seek,        |                |
|            |                                | find, and take in       |                |
|            |                                | food, water and         |                |
|            |                                | air.                    |                |
|            |                                | LS1.B Growth and        |                |
|            |                                | Development of          |                |
|            |                                | Organisms               |                |
|            |                                | Adult plants and        |                |
|            |                                | animals can have        |                |
|            |                                | young. In many          |                |
|            |                                | kinds of animals,       |                |
|            |                                |                         |                |
|            |                                | parents and the         |                |
|            |                                | offspring               |                |
|            |                                | themselves              |                |
|            |                                | engage in               |                |
|            |                                | behaviors that          |                |
|            |                                | help the                |                |
|            |                                | offspring to            |                |
|            |                                | survive.                |                |

|      |                                  | LS1.D Information                      |               |
|------|----------------------------------|--|---------------|
|      |                                  |  |               |
|      |                                  | Processing                             |               |
|      |                                  | Animals have                           |               |
|      |                                  | body parts that                        |               |
|      |                                  | capture and                            |               |
|      |                                  | convey different                       |               |
|      |                                  | kinds of                               |               |
|      |                                  | information                            |               |
|      |                                  | needed for                             |               |
|      |                                  | growth and                             |               |
|      |                                  | survival. Animals                      |               |
|      |                                  | respond to these                       |               |
|      |                                  | inputs with                            |               |
|      |                                  | behaviors that                         |               |
|      |                                  | help them                              |               |
|      |                                  | survive.                               |               |
|      |                                  | LS3.A Inheritance of                   |               |
|      |                                  |  |               |
|      |                                  | Traits                                 |               |
|      |                                  | <ul> <li>Young animals</li> </ul>      |               |
|      |                                  | are very much,                         |               |
|      |                                  | but not exactly,                       |               |
|      |                                  | like their parents.                    |               |
|      |                                  | LS3.B Variation of Traits              |               |
|      |                                  | <ul> <li>Individuals of the</li> </ul> |               |
|      |                                  | same kind of                           |               |
|      |                                  | plant or animal                        |               |
|      |                                  | are recognizable                       |               |
|      |                                  | as similar but can                     |               |
|      |                                  | also vary in many                      |               |
|      |                                  | ways.                                  |               |
| Math | Operation and Algebraic Thinking | 1.OA.A.1, 2 Represent                  | Recall        |
|      |                                  | and solve problems                     | Understanding |
|      |                                  | involving addition and                 | Application   |
|      |                                  | subtraction                            | Analysis      |
|      |                                  |  | Synthesis     |
|      |                                  | 1.OA.B.3, 4 Understand                 | o y nancolo   |
|      |                                  | and apply properties of                |               |
|      |                                  | operations and the                     |               |
|      |                                  | relationship between                   |               |
|      |                                  | addition and subtraction               |               |
|      |                                  | addition and subtraction               |               |
|      |                                  |  |               |
|      |                                  | 1.OA.C.5, 6 Add and                    |               |
|      |                                  | subtract within 20                     |               |
|      |                                  | 1.0A.D.7, 8 Work with                  |               |
|      |                                  | addition and subtraction               |               |
|      |                                  | equations                              |               |
|      |                                  | equations                              |               |

| Math           | Massurament and Data   |   | Bocall                  |
|----------------|------------------------|---|-------------------------|
| Math           | Measurement and Data   | 1.MD.A.1, 2 Measure<br>lengths indirectly and | Recall<br>Understanding |
|                |                        |   | -                       |
|                |                        | iterating length units                        | Application             |
|                |                        |   | Analysis                |
|                |                        | 21  | Synthesis               |
| Social Studies | Places and Regions     | Places can be                                 |                         |
|                | Places in my community | located on maps                               |                         |
|                | and local region       | and on a globe                                |                         |
|                |                        | <ul> <li>Maps and</li> </ul>                  |                         |
|                |                        | diagrams serve                                |                         |
|                |                        | as  |                         |
|                |                        | representations                               |                         |
|                |                        | of places,                                    |                         |
|                |                        | physical features,                            |                         |
|                |                        | and objects                                   |                         |
|                |                        | Cardinal                                      |                         |
|                |                        | directions can be                             |                         |
|                |                        | used to locate                                |                         |
|                |                        | places and                                    |                         |
|                |                        | physical features                             |                         |
|                |                        | Symbols                                       |                         |
|                |                        | represent places                              |                         |
|                |                        | and can be used                               |                         |
|                |                        | to locate                                     |                         |
|                |                        | geographic                                    |                         |
|                |                        | features and                                  |                         |
|                |                        | physical<br>characteristics                   |                         |
|                |                        |   |                         |
|                |                        | Living things                                 |                         |
|                |                        | depend on and                                 |                         |
|                |                        | modify their                                  |                         |
|                |                        | physical                                      |                         |
|                |                        | environments to                               |                         |
|                |                        | meet basic needs                              |                         |