**Subject area/course**: Science/Writing/Speaking

**Grade level/band**: Kindergarten

**Task source**: New Hampshire Task Bank; Authors: Beth Paul, Lori Benincasa, Melissa Khalil, Meghan Mongroo, & Marilyn Spatola

**Hibernation**

**TEACHER'S GUIDE**

1. **Task overview**:

Students will know what hibernation is, which animals hibernate and why they hibernate. Students will create a project that includes a written component and an oral component, which will demonstrate what the student knows about hibernation.

1. **Aligned standards:**
2. **Primary Common Core State Standards**

**CCSS.ELA-Literacy.SL.K.2** Confirm understanding of a text read aloud or information presented orally or through other media by answering questions about key details.

[**CCSS.ELA-Literacy.W.K.2**](http://www.corestandards.org/ELA-Literacy/W/K/#CCSS.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.

1. **Critical abilities**

*Analysis of Information:* Integrate and synthesize multiple sources of information (e.g., texts, experiments, simulations) presented in diverse formats and media (e.g., visually, quantitatively, orally) in order to address a question, make informed decisions, understand a process, phenomenon, or concept, and solve problems while evaluating the credibility and accuracy of each source and noting any discrepancies among the data.

*Communication in Many Forms:* Use oral and written communication skills to learn, evaluate, and express ideas for a range of tasks, purposes, and audiences. Develop and strengthen writing as needed by planning, revising, editing, and rewriting while considering the audience.

1. **NGSS**

*Next Generation Science Standards*

**K-LS1-1.** Use observations to describe patterns of what plants and animals (including humans) need to survive.

1. **Other standards**

*New Hampshire Competencies*

Science Patterns:  Students will demonstrate the ability to observe and describe patterns in natural and human designed phenomena and use those patterns to support claims about the observed or predicted relationships among phenomena.

Speaking: Students will demonstrate the ability to speak purposefully and effectively - strategically making decisions about content, language use, and discourse style

Explanatory Writing Competency: Students will demonstrate the ability to effectively write informative texts to examine and convey complex ideas for variety of purposes and audiences.

1. **Time/schedule requirements:**

This task will take about two weeks, depending on scheduling.

1. **Materials/resources:**

**Resources**

Posters in the room with key words related to hibernation

Informational Non-fiction Text:

Hibernate by: Kira Freed

Hibernation by: Paul Bennett

Why Do Animals Hibernate? by: David Martin

**Fiction Text:**

The Bear Snores On by: Karma Wilson

Hibernation Station by: Michelle Meadows

Under the Snow by: Melissa Stewart

Over and Under the Snow by: Kate Messner

Wake Me in Spring by: James Preller

Every Autumn Comes The Bear. By: Jim Arnosky

Time to Sleep by: Denise Fleming

**Video:**

<http://www.youtube.com/watch?v=AWmckQoDaNE&feature=share>

<http://www.bbc.co.uk/nature/adaptations/hibernation#intro>

<http://www.youtube.com/watch?v=vcl4FwsKDSg>

**Possible student materials: L**arge paper, scissors, glue, markers, paint, crayons, clay/play dough, illustrations of animals, or paper to draw animals, bits of leaves, grass, seeds

1. **Prior knowledge:**

Not provided.

1. **Connection to curriculum:**

This is intended to be a mid-year task, due to the connection between hibernation and winter.

1. **Teacher instructions:**

**Task introduction:**

Prompt given to the class**: “**Some people live where it is warm all year so there is no cold winter and the animals do not hibernate. You will write what you know and create a project. You will tell all about your project to show what you know about hibernation”

Show students pictures of children who live where it is warm all year. This will be the audience for their project.

**Written component:**

Students will be given two 30-minute writing blocks to complete this portion of the project. Teacher will say, “Here is your paper. Draw and write what you know about hibernation.”

The written component will be evaluated using the rubric.

**Visual component:**

Provide materials for students to use in their project. Possible materials: large paper, scissors, glue, markers, paint, crayons, clay/play dough, illustrations of animals, or paper to draw animals, bits of leaves, grass, seeds.

Allow enough time for each student to create their project (this may be over a few days).

Teacher will say, “Remember the kids in Florida who don’t know about hibernation. You have written to explain hibernation to them. Now you are going to build something to show them what hibernation looks like.”

**Oral component:**

When the project is finished, have the student show the project while orally telling what he/she knows about hibernation. The teacher may say “Tell me more” up to two times to elicit any further information. The teacher will listen for key ideas, and any evidence of “deeper” thinking.

The visual/oral component will be evaluated using the rubric.

*Rubric to evaluate student’s written and visual project and oral explanation of knowledge of hibernation:*

* 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.
* Confirm understanding of a text read aloud or information presented orally or through other media by answering questions about key details.

**Lesson 1, Introduction -** Conduct a class discussion of hibernation using the Reading A to Z book, Hibernation. Discussion points: Name animals that hibernate vs. those that do not, Things animals do to prepare for hibernation, Why animals hibernate.

**Lesson 2/3** - Read Under The Snow, Over and Under the Snow. Compare the similarities and differences between the books. Create a KWL chart listing What we already **K**now, what we **W**ant to know and what we want to **L**earn.

**Lesson 4** - Create a Main Idea, Details graphic organizer as a class group activity. Use the book Why Do Animals Hibernate? Students can act out what an animal might do, look like when it hibernates.

**Lesson 5 -** Time to Sleep: Watch a hibernation video (BBC). As a group, the class will complete a fill-in-the-blank paragraph about hibernation. Key ideas: animals need body fat, safe burrow or den, breathing slows, heart rate slows, wake in spring.

**Lesson 6 –** Poem: *Time For Hibernation.* Do an animal sort with toy/stuffed animals with the categories, Hibernates/Does not Hibernate.

**Lesson 7 -** Books: Wake Me in Spring or Every Autumn Comes the Bear or Bear Snores On

Group writing activity, share the pen to write sentences with support from the teacher: What I know about hibernation.

**Lesson 8/9 -** Students will begin collaborating on a class book about hibernation. Each student will contribute to the book with illustrations, telling information about hibernation.

 **Possible Vocabulary Ideas- Look for these key ideas in students’ written and oral product:**

Animals- Snakes, turtles, frogs, bears, moles, porcupines, mice, bats, rabbits, fish, hedgehog, woodchuck, chipmunks, squirrels, bees, ladybugs, mice, skunks, lizard, hares, beavers, groundhog, (others)

 Location- Den, Burrow, Lair, tunnel, underground, log, cave, pond, mud

 Food- Fish, nuts, berries, bark, seeds, insects, water

Layer of Fat, blubber, heart rate, don’t go to the bathroom, body temperature, slow breathing

 Key words-Hibernate, collecting, gather, store, sleep

 Seasons- Spring, Winter, Fall

 Safe from animals and cold, predators

 Teacher prompt. - **Tell me more.”**

1. **Student support:**

*Possible accommodations:*

Extra time to complete the project

A quiet space to work on the project (privacy folders)

Weighted pencils, wrist weights

Sentence starters

Word Bank

1. **Extensions or variations:**

*Possible formative assessments/activities:*

* Pre-Assessment- Tell me what you know about Hibernation… Mind map, graphic organizer
* Sequencing stages of a Bears Hibernation
* Using a read aloud to ask and answer questions
* Hibernation KWL Chart
* Main Idea- Details Chart, note student participation
* Animal/ Insect Sort- Hibernate, Do Not hibernate, note student participation
* Mad Lib- Key words fill in the blank
* Hibernation book- Fill in the word, Where do these animals sleep, create picture to go with sentence.
* Students can act out how to hibernate
* Poems and Songs- Time for Hibernation from Thematic Poems, Songs and Fingerplays by: Meish Goldish page 32, note student participation
1. **Scoring:**

Student work can be scored using the Hibernation rubric.