The Den Curriculum

January and February

Unit 5 Title: Winter

Length of Unit: 6-8 weeks

Adapted from New Fairfield Public Schools & Norwich Public Schools Preschool Curriculum

	Unit 5: Winter
Unit Overview	The purpose of this unit is to build upon students' prior knowledge of seasons and compare and contrast the characteristics of each environment. Students will develop scientific inquiry skills through observing and investigating the seasonal and environmental changes. We will expand student learning as it relates to winter primarily through two learning domains from the Connecticut Early Learning and Development Standards: Cognition Domain and Science Domain.
ESSENTIAL QUESTIONS	SCIENCE DOMAIN What happens to animals in winter? What happens to people in winter? What happens to the environment in winter? How is the environment different in winter compared to the fall? What do we notice and wonder about our natural environment? COGNITION DOMAIN How do you know that there is a problem? How can you solve a problem?
LEARNING PROGRESSIONS (STANDARDS)	SCIENCE DOMAIN ■ Investigating □ S.48.2 Intentionally vary actions in order to observe the effect of these actions on materials □ S.60.2 Engage in collaborative investigations to describe phenomena or to explore cause and effect relationships □ S.60.3 Gather data by drawing, counting or otherwise documenting observations ■ Using Evidence □ S.48.3 Cite examples to support their ideas □ S.60.4 Give evidence from observations or investigations

	○ S.60.5 Begin to distinguish evidence from opinion
	COGNITION DOMAIN ■ Problem Solving □ C.48.9 Think of and try an alternative strategy when a first attempt at solving a problem is unsuccessful □ C.60.11 Try multiple strategies to solve a problem and draw on multiple resources (e.g., look at what a peer is doing for ideas)
FOCUS AREAS	 Environment (trees / plants, weather) Animals (hibernation, migration, life-cycles) People (adapt, activities, clothing)
KEY VOCABULARY	 Science (melting, freezing) Weather (winter, blizzard, icicle, frost, temperature, sleet, slush, snow) Animals (den, predator, survive, hibernation, migration, adaptation) Activities (snowboarding, skiing, ice hockey, sledding, building snowmen, ice skating)

Key Knowledge	Key Skills
My students will know	My students will be able to (do)
 How winter affects people, animals and plants (environment) What strategies animals and people use in the winter What migration, hibernation and adapt mean How the winter differs from the fall What animals hibernate, migrate and adapt 	 Identify strategies animals and people use to stay safe in the winter Identify some animals that migrate, hibernate and adapt Give examples of how people and animals adapt in the winter Identify a problem

Unit Assessment

TEACHING STRATEGIES AND EXPERIENCES

(Multiple means of representation, expression and engagement)

- Model and describe the process of making observations of objects using clear and specific vocabulary
- Model asking open-ended questions to stimulate thinking and inquiry
- Engage children around design challenges that are relevant to their lives (e.g., "Let's see if we can make something that will let us reach the toy that fell behind the shelf.")
- Encourage children to ask questions about objects, and events
- Invite children to document and discuss their observations through drawing, sketching, sculpting with clay or play dough, writing, etc.
- Model and encourage a sense of wonder about nature, the world and science
- Provide children with personal materials to record their investigations
- Encourage children to ask "how" and "why" questions
- Observe children in play
- Model communication about sensory observations
- Interact in a way that expands a child's curiosity
- · Ask questions about something you and the child have seen, heard or touched
- Give children opportunities to work together to reach a goal, allow them to evolve the project
- Be sure to provide toys and materials that interest children
- Allow time for children to share their experiences in their own way
- Provide toys and materials that encourage cooperative use
- Encourage positive attitudes about mistakes
- Point out the many different ways that things get done
- Provide tasks where the goal is trying different strategies rather than right or wrong answer
- Comment on children's perseverance
- Support children to find answers to their questions, support them to brainstorm ways they can do that e.g., ask someone, read a book, try another way
- Offer choices
- Share in children's excitement about their discoveries
- Expand children's ideas by wondering out loud about events
- Role-playing (i.e. Going on a Bear Hunt) or (The Mitten by Jan Brett)
- Act out and discuss songs events/actions/stories that involve problem solving (What if we went on a Bear-Hunt in the winter? How
 would you get across the frozen lake in the winter? Using materials in the room to create things to help them get around these
 problems: i.e. using blocks to build snow-shoes to get through the snow)

Children with Disabilities

- Ensure physical access to materials that promote the use of scientific practices including sensory tables, the outdoors, plant and animal life, etc
- Provide visual supports during multistep activities
- Ensure children have multiple ways to communicate about their observations, questions and growing knowledge
- Use sensory experiences that promote touching, tasting, smelling and holding
- Model scientific practices visually and verbally
- Carefully observe children during routines to determine indications of interest in objects or experiences
- Offer choices that intentionally include a preference
- Provide toys that are multisensory
- Provide preferred toys
- For children who are blind or visually impaired, keep furniture arrangements the same
- For children who are blind or visually impaired, store preferred toys and snacks in the same locations
- Be sure children who are deaf or who have hearing loss can see you when interacting with them
- Station adults in high-interest areas to facilitate engagement of all children
- Use embedded instruction
- Provide adapted or individualized materials that can be used to learn about cause and effect, such as large cars that children with fine motor challenges can hold and push

Children who are Dual Language Learners

- Use body language and facial expressions to encourage observation and investigation
- Use gestures paired with language, ask questions and model investigations
- Use simple language to build new vocabulary related to observations and investigations
- Use repetition of vocabulary and process
- Allow children to express their ideas and questions through drawings, gestures, phrases and whatever means available to them to communicate
- Use gestures paired with language
- Learn small phrases in the child's home language
- Encourage parents to continue to speak to the child in the family's home language
- Describe your actions as you complete them
- Use exaggerated facial expressions and gestures.
- Describe children's actions as they play.
- Build relationships with families.
- Create small groups that include peers with more English vocabulary.

DIFFERENTIATION

• Directly teach vocabulary that is linked to accomplishing the strand goal.

RESOURCES

Fiction

- Bear Snores On (Karma Wilson) Fiction
- The Mitten (Jan Brett)
- The Hat (Jan Brett)
- The Snowy Day (Ezra Jack Keats)
- Snowmen at Night (Caralyn Buehner)
- The Missing Mitten Mystery (Steven Kellogg)
- The Jacket I Wear In the Snow (Shirley Neitzel)
- Time to Sleep (Denise Fleming)
- Moon Cake (Frank Asch)
- Snow (Uri Shulevitz)
- Winter is Here (Kevin Henkes)
- Big Snow (Jonathan Bean)
- Here comes the Snow (Angela Shelf Medearis)

Nonfiction

- Animals in Winter (Martha E.H. Rustad)
- Snowflakes (Martha E.H. Rustad)
- People in Winter (Martha E.H. Rustad)
- Stranger in the Woods (Carl R. Sams II & Jean Stoick)
- A Bed for Winter (Karen Wallace)
- Best in Snow (April Pulley Sayre)

Websites / Videos

- Hibernation Sing-Along Video
- Real Black Bears and Cubs In Hibernation
- I Can't Wait To Hibernate by Brett Holmes
- Bear Snores On
- Going on a Bear Hunt
- Great website to locate further kid-friendly resources (use the codes)
 - 1429622016 1429622024 1429622008
- Prekinders.com

Songs

- Winter Songs
- Winter Songs from Prekinders

ENGAGING FAMILIES	 What does your family like to do in the winter (child brings in photograph or draws a picture)? Ask families to share a picture or video of snowman they built. Newsletters Book lists Class Books Ask families to share: Has your family lived in other areas? What was winter like there?
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