

# IB Inquirer Pre-K



How the World Works

Unit 4/Winter

## Transdisciplinary Theme:

How the World Works - an inquiry into how humans use their understanding of scientific principles

## Central Idea:

Nature and natural cycles can be observed using the five senses.

A study into (lines of inquiry):

- Plants, animals and ourselves (form)
- Foods & growing cycles (change, causation)

## Background:

During the winter portion of this IB unit, students will walk outside and use their senses to notice how things have changed since autumn. They will study about winter life for plants and animals (hibernation, leafless trees, etc.). Students will chart the different weather conditions - and notice how this affects their clothing and activity choices. They will make "Stone Soup" and hot chocolate; and investigate freezing and melting water. They will plant an amaryllis bulb and watch it grow indoors.

## Student Final Project:

Students will write/illustrate a collection of journal entries describing nature and products of nature. Using their five senses, they will make predictions and clothing choices based on their understanding of changing patterns in weather.

## Technology Tie-In:

During this unit, students will begin learning computer basics in the computer lab. They will navigate their way around the *Lexia* website - practicing mouse control and locating letters on the keyboard.

### **Field Experiences:**

Students will take nature walks to observe and collect specimens from the season. They will incorporate winter vocabulary when they travel to Auer Farm to see the sap collecting process; and visit Home Depot to check out the specific home and garden items used in the winter.

### **Learner Profiles & Attitudes:**

During experiments with snow (building/investigating properties), students will be confident as they state their observations and make predictions. They will be independent in choosing appropriate clothing. They will be risk-takers when they try winter foods. As inquirers, students will be curious about winter weather and enthusiastically ask questions about the winter habits and habitats of living things.

### **Key Concepts:**

Students will use their senses to examine form by observing the distinct attributes of the winter season. They will investigate the causes of the seasonal cycles; and look at the changes in weather patterns from day to day.

### **Approaches to Learning:**

Students will use their research skills when they formulate questions connecting their sensory experiences to the winter season; and observe and collect data during experiments. They will use their self-management skills during class activities when they utilize their gross & fine motor skills, and engage in safe behavior.

#### **TRY THIS!**

- Visit the grocery or department store - and have your child point out all of the "winter" items on display or for sale.
- Try snow painting! Fill squirt bottles or spray bottles from a craft store with water and food coloring. Then send your little artists outside to add some color to the white landscape. They can make a painting - or build a sculpture and decorate it. Take photos of their art.
- Winter is a great time for puzzles. Go to the dollar store, and pick up some puzzles to work on together.

**Websites:** [www.pebblego.com](http://www.pebblego.com) user name: coia password: school

Choose the Earth & Space database and look for "weather" and "seasons." You can also investigate animals (habitats & behavior).

[www.abcmouse.com](http://www.abcmouse.com) user names and passwords have been provided by Ms. Dustin.

*PARENTS: Additionally, on the Media Center webpage, for each unit there will be suggested titles for more reading on the topics and ideas in the units. These books are available in the school library.*

# IB AT HOME

Name \_\_\_\_\_

Teacher \_\_\_\_\_

Parents: please circle any of the elements your child is showing at home then share details below:

## Approaches to Learning:

**Self-Management Skills**



- Gross Motor Skills
- Fine Motor Skills
- Spatial Awareness
- Organizational Skills
- Time Management
- Personal Safety
- Healthy Lifestyle
- Codes of Behavior
- Making Informed Choices

**Research Skills**



Formulating Questions

- Observing
- Planning
- Collecting Data
- Recording Data
- Organizing Data
- Interpreting Data
- Presenting Research Findings

## Learner Profile:

**INQUIRER**  
*I ask questions and do research to learn new things.*



I like to discover new things about the world. I am enthusiastic and curious. I work to find answers to my questions. I will carry this love of learning throughout my life.

**RISK-TAKER**  
*I try new things.*



I have the courage to try something new. I'm not afraid to give it a go, even if I feel shy. I am resilient and determined. I try to solve problems in different ways. I stand up for what I believe.

## Attitudes:



**Curiosity**

We are curious about the nature of learning. We also wonder about the world, its people, and cultures.



**Enthusiasm**

We enjoy learning and willingly put effort into the process.



**Independence**

We think and act independently, making our own judgments based on reasoned principles. We defend our judgments.



**Confidence**

We are confident in our abilities. We have the courage to take risks, apply what we have learned, and make appropriate choices/decisions.

## Key Concepts:

**CAUSATION**  
**Why is it the way it is?**

Things do not just happen. There are causal relationships at work and actions have consequences.

How did this begin?  
What caused this to happen?  
How did \_\_\_\_\_ lead to \_\_\_\_\_?  
What influenced...?  
How did \_\_\_\_\_ affect \_\_\_\_\_?

**CHANGE**  
**How does it change?**

Change is a process of movement from one state to another; it is universal and inevitable.

How has \_\_\_\_\_ changed?  
Can you change a \_\_\_\_\_ into a \_\_\_\_\_?  
In which ways has it been changed?  
Can it change back?  
How can you make it change?

**FORM**  
**What is it like?**

Everything has a form with recognizable features which can be observed, identified, described and categorized.

What is...?  
What are...?  
What kind of...?  
What is it like?  
What patterns do you see?  
How do you describe...?

My child has been demonstrating the IB elements circled above by:

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My child has taken action (additional investigations, trying to make a difference, reading more about the subject, doing an independent project, teaching others, etc.) regarding this unit. Here's how:

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\*Continue on back if needed—OR—post to our padlet: [www.padlet.com/COIA/ibathome](http://www.padlet.com/COIA/ibathome)