

Using Norbert to learn...a grade one introduction to inquiry learning

Art:

Outcome: CP1.7

Investigate a variety of formal and informal patterns in art works and the environment, and apply observations to own work.

- a. Identify and create formal patterns (repetition at regular intervals) and informal patterns (repetition at irregular intervals) in surroundings and art works (e.g., the pattern on a butterfly's wings is a formal pattern whereas dandelions scattered in a field create an informal pattern).

ELA:

Outcome: CR1.4

Read and comprehend grade-appropriate texts (including narratives, informational texts, scripts, and poems) by relating the sequence (i.e., beginning, middle, and end), the key points (who, what, when, where, and why), and the problems and solutions.

- a. Read and interpret own writing, experience charts, labels, symbols, and print in environment.
- b. Distinguish between fiction and non-fiction.

Outcome: CC1.1

Compose and create a range of visual, multimedia, oral, and written texts that explore and present thoughts on: identity (e.g., Feelings) community (e.g., Neighbourhood) social responsibility (e.g., Plants and Trees).

- c. Use inquiry to explore a question or topic of interest related to the themes and topics being studied:
 - a. Discuss personal knowledge and understanding of a topic to discover research interests and needs.
 - b. Use the language of inquiry (e.g., "I want to find out if ...", "I know ...").
 - c. Ask questions to satisfy personal curiosity on a topic and discuss information needs.
 - d. Ask and answer questions to help satisfy group curiosity and information needs on a specific topic.
 - e. Answer questions using visual, multimedia, oral, and print sources.

- f. Understand that resource centre materials have a specific organization system and use titles to locate information and ideas.
- g. Recognize when information answers the questions asked.
- h. Collect and organize relevant ideas and information.
- i. Represent and tell key ideas and facts in own words.
- j. Share with peers and teacher what was learned through inquiry.

Outcome: CC1.2

Represent key ideas and events, in a logical sequence and with detail, in different ways (including dramatization, pictures, sounds, physical movement, charts, models, and drawings).

- d. Explore electronic technology to represent ideas and events.

Outcome: CC1.3

- e. **Speak clearly and audibly about ideas, experiences, preferences, questions, and conclusions in a logical sequence, using expression and dramatization when appropriate.**
- f. Share and talk about what is being learned, and stay on topic when speaking.
- g. Participate in small-group work.
- h. Answer questions in complete sentences.

Outcome: CC1.4

Write and share stories and short informational texts about familiar events and experiences in a minimum of five sentences.

- a. Write about familiar topics using the learned vocabulary to express ideas.
- b. Create short texts including informational texts, autobiographical narratives, imaginative stories, and poems with own ideas following a model.
- c. Write brief explanations and descriptions (accompanied by pictures) of real objects, persons, and places.

Health:

Outcome: USC1.5

Explore the association between a healthy sense of “self” and one’s positive connection with others and the environment.

- a. Recognize a personal connection to other living things (e.g., gardening - food, love and affection - pets).

Science:

Outcome: LT1.1

Differentiate between living things according to observable characteristics, including appearance and behaviour. [CP, SI]

- a. Use a variety of sources of information and ideas (e.g., picture books including non-fiction texts, Elders, naturalists, videos, Internet sites, and personal observations) to learn about observable characteristics of living things.
- b. Make and record observations and measurements about the observable characteristics of plants and animals using written language, pictures, and charts.
- c. Record information, using written language, pictures, and tables, about the appearance and behaviour of familiar animals, such as classroom or personal pets, at regular intervals over a specific time interval
- d. Describe the appearance and behaviour (e.g., method of movement, social grouping, diet, body covering, habitat, and nocturnal vs. diurnal orientation) of familiar animals (e.g., bumblebee, worm, dog, cat, snake, owl, fish, ant, beaver, rabbit, and horse).
- e. Communicate knowledge (e.g., share a story, describe an experience, or draw a picture) about the observable characteristics of a favourite plant or animal.
- f. Respond positively to others' questions and ideas about the observable characteristics of living things.

Outcome: LT1.2

Analyze different ways in which plants, animals, and humans interact with various natural and constructed environments to meet their basic needs. [CP, DM, SI]

- a. Identify the physical needs, (i.e., food, water, air, and shelter) that plants, animals, and humans require for survival.
- b. Pose questions about ways in which animals interact with their environments to meet their basic needs (e.g., How does a bird move from one tree to another? Where do animals go at night or during the day? How do animals escape from predators?).
- c. Explore how people demonstrate respect for living things by caring for domestic plants and animals (e.g., growing a plant, hatching eggs, and keeping a pet)

Outcome: OM1.1

Investigate observable characteristics and uses of natural and constructed objects and materials in their environment. [CP, SI]

- a. Predict the characteristics (e.g., hardness, insulating ability, water resistance, absorbency, and flexibility) of common materials and carry out a procedure to test those predictions.
- b. Suggest alternative uses for common objects and materials.
- c. Evaluate the suitability of materials for a specific function

Outcome: OM1.2

Examine methods of altering and combining materials to create objects that meet student- and/or teacher-specified criteria. [SI, TPS]

- a. Use appropriate tools (e.g., glue, scissors, and stapler) correctly and safely for manipulating and observing materials and when constructing useful objects.
- b. Follow a simple procedure to make a useful object from recyclable materials (e.g., picture frame from old puzzles, holiday ornament from juice can lid, and musical instrument from tissue rolls).
- c. Design and construct a useful object that meets a student specified function by selecting, combining, joining, and/or altering materials.
- d. Evaluate, using student-identified criteria, personally-constructed objects with respect to their suitability for a particular function.
- e. Communicate procedures and results of their design and construction process using drawings, demonstrations, and written and oral descriptions.
- f. Examine methods (e.g., gluing, stapling, taping, and buttoning) of joining materials of the same and different types
- g. Select and use materials to carry out explorations of altering materials to change their appearance, texture, sound, smell, or taste (e.g., sanding, painting, or waxing a piece of wood, mixing two or more paints to obtain a particular shade or colour, popping popcorn, shaping clay, drying meat, tuning an instrument, and cooking food at different temperatures) to change the way they are used

Lessons:

1. Introduce Norbert

- General discussion – what he is, where he will live and our role to keeping him healthy and happy
- Talk about the parts of his home, what he needs to survive
- Talk about responsibility in caring for a pet
- Connections to home – who has/had pets and what did were their responsibilities with regard to owning a pet

Write letter to Petsmart thanking them for the grant money that enabled us to have Norbert join our family

2. Questions

- Introduce questions/statements
- Talk about thick vs thin questions
- Begin to generate I wonder questions about Norbert – at this point we will accept all kinds of questions, thick or thin
- Once all our questions are on the wonder-wall with sticky notes, we will begin to weed out the thin questions that can be answered with yes or no. Then we will also group like questions together.

Brainstorm ways that we might find answers to our questions and post this on our “Norbert” board

3. Answering Questions

- Over the course of the next few weeks we will seek answers to our questions using the methods we discussed in Lesson 2.
- As we find answers to our questions – we will invite family members to post questions about Norbert via the class blog. We will post these questions on our “Wonder-wall” using a different color sticky note and seek ways to answer these questions as well.

As we find answers to our questions, we will post them on our Norbert board as well as on our blog for the families to participate in our learning

- Discuss what we should do with the new knowledge we have gained.

4. Creating Homes

- Using found objects our goal will be to create “Homes for Norbert” that will include provisions for food, shelter and water.
- We will begin by discussing what living things need to survive, then narrow our focus to Norbert specifically.
- We will plan our homes carefully and collect the objects we will need
- With the help of our care partners we will construct our homes

5. Creating Patterns with Norbert.

- Using a leopard gecko outline we created line pattern art

6. Exploring authors (what makes a good book?)

- Explore fiction and non-fiction books
- Create our own non-fiction book based on the knowledge we gained over the year of caring for and learning about Norbert
- Publish the final book