Science 1-5:



Recommended Resources for the Renewed Curricula

A list of professional materials available for borrowing from the Stewart Resources Centre – January 2012



The STF Stewart Resources Centre – CHECK US OUT!

In order to serve you better, we have compiled the following list of resources that directly address some of your professional needs. We hope you find this publication helpful, and we would be pleased to hear from you if you would like us to continue producing more specialized resource lists, or if you have suggestions on how we can improve our service to you. We want to serve you better!

We make it easy for you to use the Stewart Resources Centre:

- For rural schools, we mail our resources directly to you and provide a postage-paid mailing label for you to use to mail the resources back to us. (Audio-visual resources are excluded from the Canada Post library mailing rate, so you will need to pay postage to return these items.)
- For schools in Saskatoon, your resources arrive at your school through the weekly inter-school mail delivery. Materials may also be returned to us using this courier system.
- You don't need to know the exact titles for resources you need. Provide a topic and an approximate grade level at which you would like to use the materials, and we will do the rest!
- We are accessible 24 hours a day through the STF website: www.stf.sk.ca You may search our catalog online or email us your resource requests at: src@stf.sk.ca
- Call us! STF members may call the Stewart Resources Centre toll-free at 1-800-667-7762, ext. 6323, or we can be reached at 373-1660, ext. 6323 for local calls.
- Visit us in person! We are open 8:30 a.m. to 5:00 p.m. from Monday to Friday.

<u>SCIENCE GRADE 1</u>



Indicates item is a Ministry of Education's Core Learning Resource.

Addison-Wesley Science & Technology 1



372.35 A227

At the playground / Harcourt, Lalie. Wortzman, Ricki.

Changes all around me / Harcourt, Lalie. Wortzman, Ricki.

Energy for work and play / Harcourt, Lalie. Wortzman, Ricki.

It's alive / Harcourt, Lalie. Wortzman, Ricki.

Looking at shoes / Harcourt, Lalie. Wortzman, Ricki.

Addison Wesley science and technology, grade 1. Teacher's guide / Harcourt, Lalie. Wortzman,

Ricki.

Don Mills, ON: Addison-Wesley, 2000.

Subjects: Structural engineering – Juvenile literature. Force and energy – Juvenile literature. Seasons – Juvenile literature. Shoes – Juvenile literature. Biology – Juvenile literature.

Summary: This science resource includes information, activities, and teacher support material that address all four units of Saskatchewan's Grade 1 science curriculum. The student books each contain numerous illustrations, a table of contents, a glossary, a review section, and an index.

398.2 C338

The barefoot book of earth tales / Casey, Dawn.

Cambridge, MA: Barefoot Books, 2009.

Subjects: Tales. Ecology – Folklore.

Summary: In this collection of seven folktales, readers will discover how various cultures celebrate our connection with nature and will be reminded how important it is to take care of Mother Earth. The narratives will increase understanding of our relationship with the land, celebrate the beauty of the natural world, and share wisdom to take care of the Earth. Includes an "eco-activity" for each tale.

372.35 T512

Before and after: a book of nature timescapes / Thornhill, Jan.

Toronto, ON: Maple Tree Press, 2005.

Subjects: Habitat (Ecology) – Juvenile literature.

Summary: Thornhill examines changes in habitats using measures of time. Children observe changes in a tropical coral reef, an African savannah, the Australian forest edge, a wetland, a meadow, a South American rainforest, and a schoolyard.

Annotations have been excerpted from book descriptions provided by the publishers and from bibliographies
distributed by the Saskatchewan Ministry of Education.

535.6 C848

The black book of colors / Cottin, Menena. Faria, Rosana.

Toronto, ON: Groundwood Books, 2008.

Subjects: Colors – Juvenile literature. Touch – Juvenile literature. Blind – Books and reading – Juvenile literature.

Summary: This book invites readers to imagine living without sight through remarkable illustrations done with raised lines and descriptions of colours based on imagery. Braille letters accompany the illustrations and a full Braille alphabet offers sighted readers help reading along with their fingers.



500.8997 A291

Bridging cultures: scientific and Indigenous ways of knowing nature / Aikenhead, Glen. Michell, Herman.

Toronto, ON: Pearson, 2011.

Subjects: Science – Study and teaching. Ethnoscience. Native peoples – Canada – Education. Indian philosophy.

Summary: The recognition of Indigenous knowledge as an important, legitimate source of understanding of the physical world is increasing within education jurisdictions worldwide. This book provides science educators with knowledgeable perspectives on scientific and Indigenous content.



372.35 B655

Creating a classroom community of young scientists (2nd ed.) / Bloom, Jeffrey W.

New York, NY: Routledge, 2006.

Subjects: Science – Study and teaching (Elementary).

Summary: The author approaches science education through an inquiry-based and activities-based method. Students are responsible for (and in control of) their own and others' learning. Features in the book include examples of classroom practice, questions for reflection, planning and implementing instruction, and suggestions on how to include technology in the science classroom.

791.4334 C975

The curious garden [DVD]

Norwalk, CT: Weston Woods, 2010.

Subjects: Gardening – Juvenile films. City and town life – Juvenile films.

Summary: In this animated DVD program, Liam lives in a city that is dark and grey. While exploring one day, Liam discovers a stairwell that leads to old railroad tracks. Among the tracks is a patch of dying wildflowers. Liam decides to take care of the garden. He learns to water and prune the plants. As the garden starts to spread, the city is transformed into a colourful world.

791.4334 D539

Diary of a worm: ... and 4 more great animal tales [DVD]

Weston, CT: Weston Woods, 2006.

Subjects: Animals – Juvenile films. Children's films. Animated films.

Summary: The *Diary of a Worm* reveals how a young worm discovers, day by day, that there are some very good and some not so good things about being a worm in this great big world.

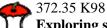
591.468 A857

An egg is quiet / Aston, Dianna Hutts.

San Francisco, CA: Chronicle Books, 2006.

Subjects: Embryology – Juvenile literature. Eggs – Juvenile literature.

Summary: Aston introduces over 60 different types of eggs to young children. She describes why some eggs are shaped a certain way, why some eggs use camouflage, and why some eggs are textured. She includes three life cycles of animals that start as an egg.



Exploring safely: a guide for elementary teachers / Kwan, Terry. Texley, Juliana.

Arlington, VA: NSTA Press, 2005.

Subjects: Science – Study and teaching (Elementary) – Safety measures.

Summary: This resource relieves the many safety concerns that come with teaching elementary level science. The emphasis is on positive options for avoiding potential hazards. Chapters include making safe work habits second nature to students, equipping the classroom for safety, and choosing and culturing live plants and animals for classroom study.

Exploring the Elements Series

551.5 K16

Who likes the rain? / Kaner, Etta. Toronto, ON: Kids Can Press, 2007.

Subjects: Rain and rainfall – Juvenile literature.

Summary: Young readers will discover why rain falls, what raindrops really look like, why the air smells different after a rain and much more.

551.5 K16

Who likes the snow? / Kaner, Etta. Toronto, ON: Kids Can Press, 2006. Subjects: Snow – Juvenile literature.

Summary: Young readers will discover why snow is white, what snowflakes look like up close, how snow makes the night brighter and much more.

551.5 K16

Who likes the sun? / Kaner, Etta. Toronto, ON: Kids Can Press, 2006. Subjects: Sun – Juvenile literature.

Summary: Students will discover how the sun makes shadows, why water sparkles in the sun, how the sun helps make rainbows and much more.

551.5 K16

Who likes the wind? / Kaner, Etta. Toronto, ON: Kids Can Press, 2006. Subjects: Winds – Juvenile literature.

Summary: Students will discover why the wind blows, how leaves are blown from trees, where the wind blows a seed and much more.

372.35 H236

Hands-on science 1 / Lawson, Jennifer.

Winnipeg, MB: Portage & Main Press, 1999.

Subjects: Science – Study and teaching (Primary).

Summary: This resource has four instructional units: Unit 1: Characteristics and Needs of Living Things; Unit 2: Characteristics of Objects and Properties of Materials; Unit 3: Everyday Structures; and Unit 4: Daily and Seasonal Changes. Each unit is divided into lessons that focus on specific curricular outcomes. Each lesson contains: materials lists, activity descriptions, questioning techniques, activity centre and extension ideas, assessment suggestions, and activity sheets and visuals.

791.4334 H772

Honey, honey ... lion! [DVD]

New York, NY: Spoken Arts, 2006.

Subjects: Sharing – Juvenile films. Children's films. Africa – Juvenile films.

Summary: Based on the picture book of the same title by Jan Brett, this video tells of a honeyguide bird who always leads an African Badger to honey. The badger works to claw the honeycomb out, and the partners share the honey. One day, the badger decides not to share with the honeyguide, and the bird retaliates by leading the badger to a lion. After nearly losing his life, the badger learns a valuable lesson.

598.417 S275

Honk, honk, goose! : Canada geese start a family / Sayre, April Pulley.

New York, NY: Henry Holt, 2009.

Subjects: Canada goose – Juvenile literature.

Summary: The roles of male and female geese that are starting a family are described. At the back of the book is additional information on the Canada goose, migrating and resident geese, and a suggestion for a budding scientist.

599.786 D256

Ice bear: in the steps of the polar bear / Davies, Nicola.

Cambridge, MA: Candlewick Press, 2005. Subjects: Polar bear – Juvenile literature.

Summary: This book describes how the polar bear, also called Nanuk, thrives in the Arctic and explains the lessons that the Inuit people have learned from watching the creature.

590 R982

In my backyard / Ruurs, Margriet.

Toronto, ON: Tundra Books, 2007.

Subjects: Animals – Juvenile literature.

Summary: Children discover the animals that live in their backyards throughout the year. The wren is often the first sign that spring has arrived. Toads, snails, and snakes can be found in the backyard. Other animals featured in the book include a hummingbird, wasps and spiderlings, bats, and possums. The book includes a legend which contains brief information about each animal in the book.

507.1 H224

Integrating science with mathematics & literacy: new visions for learning and assessment (2nd ed.) / Hammerman, Elizabeth. Musial, Diann.

Thousand Oaks, CA: Corwin Press, 2008.

Subjects: Science – Study and teaching – Activity programs. Science – Ability testing. Mathematics – Study and teaching. Language arts.

Summary: The authors provide suggestions to integrate science with mathematics and literacy. They encourage teachers to develop reliable processes for assessing both their teaching practice and student learning. Included in the book are over 20 performance assessments to promote student engagement. The assessments model inquiry-based science to allow learners to demonstrate their understanding of concepts through exploration, inquiry, and application.

Looking Closely Series

372.35 S481

Across the desert / Serafini, Frank Toronto, ON: Kids Can Press, 2008. Subjects: Desert biology – Juvenile literature.

Summary: Readers are first challenged to guess the identity of each close-up photograph. The next page reveals the entire photograph of the plant, animal or natural object accompanied by a simple but detailed description of the habitat.

372.35 S481

Along the shore / Serafini, Frank Toronto, ON: Kids Can Press, 2008.

Subjects: Seashore biology – Juvenile literature.

Summary: Readers are first challenged to guess the identity of each close-up photograph. The next page reveals the entire photograph of the plant, animal or natural object accompanied by a simple but detailed description of the habitat.

372.35 S481

Around the pond / Serafini, Frank

Toronto, ON: Kids Can Press, 2010.

Subjects: Pond plants – Juvenile literature. Pond animals – Juvenile literature.

Summary: Readers are first challenged to guess the identity of each close-up photograph. The next page reveals the entire photograph of the plant, animal or natural object accompanied by a simple but detailed description of the habitat.

372.35 S481

Inside the garden / Serafini, Frank

Toronto, ON: Kids Can Press, 2008.

Subjects: Plants – Juvenile literature. Garden animals – Juvenile literature.

Summary: Readers are first challenged to guess the identity of each close-up photograph. The next page reveals the entire photograph of the plant, animal or natural object accompanied by a simple but detailed description of the habitat.

372.35 S481

Through the forest / Serafini, Frank

Toronto, ON: Kids Can Press, 2008.

Subjects: Forest plants – Juvenile literature. Forest animals – Juvenile literature.

Summary: Readers are first challenged to guess the identity of each close-up photograph. The next page reveals the entire photograph of the plant, animal or natural object accompanied by a simple but detailed description of the habitat.

333.72 S619

Love your world: how to take care of the plants, animals, and the planet / Sirett, Dawn.

New York, NY: DK Publishing, 2009.

Subjects: Green movement – Juvenile literature. Energy conservation – Juvenile literature.

Environmental protection – Citizen participation – Juvenile literature.

Summary: This book demonstrates to young children what they can do to help the environment. Suggestions are provided to help wildlife such as putting up a bird house or growing plants that bees and butterflies like. Children will learn the three Rs: reduce, reuse, and recycle. At the back of the book are additional suggestions as young children promise to continue to care for the planet.

530 G458

Materials: liquids, solids, and gases: their properties and uses / Gifford, Clive.

Boston, MA: Kingfisher, 2005.

Subjects: Matter – Juvenile literature. Materials – Juvenile literature.

Summary: Students will learn why some materials sink or float, other materials can be bent or stretched, and some materials can be used as building blocks. At the end of the book are activities for students to try using various materials that can be found at school or in the home.



372.35 M685

Mixing it up: integrated, interdisciplinary, intriguing science in the elementary classroom Arlington, VA: NSTA Press, 2003.

Subjects: Science – Study and teaching (Elementary). Interdisciplinary approach in education. Summary: This resource provides over 25 suggestions to assist educators in combining concepts and processes within the sciences or among the disciplines. The book is divided into two sections: helping students build connections and school and community connections.

398.208997 C691

Niiwin: four Ojibwa critter tales / Coleclough, Kathleen.

Riceton, SK: Kakwa Publishing, 2006.

Subjects: Ojibwa Indians – Folklore. Nanabush (Legendary character) – Legends.

Summary: A group of Elders are berry picking, and Antoinette becomes separated from the group. As Antoinette picks berries, she sees four animals and tells a narrative about each animal. There is a brief introduction where Coleclough introduces the importance of Elders, storytelling, and Nanabozho, who is a spirit in human form. Teachers may consider inviting an Elder or traditional knowledge keeper into the classroom to tell the narratives.

372.357 C689

On Meadowview Street / Cole, Henry.

New York, NY: Greenwillow Books, 2007.

Subjects: Nature – Juvenile fiction. Meadows – Juvenile fiction.

Summary: Upon moving to a new house, young Caroline and her parents encourage wildflowers to grow and birds and animals to stay in their yard, which soon has the whole suburban street living up to its name.

Pan-Canadian Science Place 1



624.1 C951

Design team / Cross, Gary. Fazio, Xavier. Kelly, Don.

Design team: teacher's guide / Cross, Gary. Fazio, Xavier. Kelly, Don.

Toronto, ON: Scholastic, 2000.

Subjects: Structural engineering – Juvenile literature.

Summary: This book presents science lessons related to everyday structures.



525.35 C951

Earth watch / Cross, Gary. Fazio, Xavier. Kelly, Don.

Earth watch: teacher's guide / Cross, Gary. Fazio, Xavier. Kelly, Don.

Toronto, ON: Scholastic, 2000.

Subjects: Seasons – Juvenile literature. Weather – Juvenile literature.

Summary: This book presents science lessons related to daily and seasonal cycles.



620.11 C951

What's it like? / Cross, Gary. Fazio, Xavier. Kelly, Don.

What's it like?: teacher's guide / Cross, Gary. Fazio, Xavier. Kelly, Don.

Toronto, ON: Scholastic, 2000.

Subjects: Materials – Juvenile literature.

Summary: This book presents science lessons related to the characteristics of objects and properties of materials.



371.102 P887

Powerful learning : what we know about teaching for understanding / Darling-Hammond, Linda.

San Francisco, CA: Jossey-Bass, 2008.

Subjects: Learning. Effective teaching.

Summary: The authors provide a number of teaching practices including project-based learning, cooperative learning, performance-based assessment, as well as instructional strategies in literacy, mathematics, and science.

Primary Physical Science Series

372.35 M398

Change it!: solids, liquids, gases and you / Mason, Adrienne.

Toronto, ON: Kids Can Press, 2006.

Subjects: Matter – Properties – Juvenile literature.

Summary: The author takes the physics of matter - solids, liquids and gases - and transforms it into an

enjoyable and easy-to-understand science book.

372.35 M398

Move it!: motion, forces and you / Mason, Adrienne.

Toronto, ON: Kids Can Press, 2005.

Subjects: Motion – Juvenile literature. Force and energy – Juvenile literature.

Summary: This book takes the physics of why and how things move and transforms it into an

enjoyable and easy-to-understand first science book.

372.35 M398

Touch it!: materials, matter and you / Mason, Adrienne.

Toronto, ON: Kids Can Press, 2005.

Subjects: Matter – Properties – Juvenile literature. Materials – Juvenile literature.

Summary: This book follows science curricula and is loaded with surprising facts and hands-on activities designed to hold young readers' interest and tap into their fascination with the everyday world. It explores materials - their colour, shape, texture, size, mass, magnetism and more.

372.35 R287

Readings in science methods, K-8 / Brunsell, Eric (Ed.).

Arlington, VA: NSTA Press, 2008.

Subjects: Science – Study and teaching (Elementary). Science – Study and teaching (Middle school). Summary: This collection of NSTA journal articles allows practising teachers to reflect upon what is already known in their science teaching. The contributors provide suggestions for new approaches to teach classroom science.

507.1 S128

Safety in the science classroom: kindergarten to grade 12

Edmonton, AB: Alberta Education, 2006.

Subjects: Science – Study and teaching – Safety measures. Safety education. Safety measures.

Science rooms and equipment – Safety measures.

Summary: This is a comprehensive manual regarding science safety. While Part A focuses on general safety management, Part B contains specific information around safety, storage, and management of chemical, biological, and physical hazards in the classroom relevant to science teachers at all grade

levels. Appendices include examples of science safety rules and procedures, sample student safety contracts, and a chemical laboratory safety inspection checklist.

813.6 H236

Sandy's incredible shrinking footprint / Handy, Femida. Carpenter, Carole.

Toronto, ON: Second Story Press, 2010.

Subjects: Nature – Effect of human beings on – Juvenile fiction. Recycling (Waste, etc.) – Juvenile fiction. Environmental protection – Juvenile fiction.

Summary: Sandy loves to visit her grandpa's house by the beach. Sandy and her dog, Pepper, play in the sand. One day her walk to the beach is ruined as it is littered with garbage. Sandy meets the "Garbage Lady" who keeps the beach clean by recycling materials found on the beach. Along the way, she teaches Sandy about her "footprint". Sandy discovers that by recycling and reusing items, she is shrinking her footprint.

731.75 S734

Solomon's tree / Spalding, Andrea.

Victoria, BC: Orca, 2002.

Subjects: Tsimshian masks – Juvenile literature. Tsimshian Indians – Juvenile literature.

Summary: On the West Coast of Canada, Solomon has developed a special relationship with a large maple tree in his yard. Through the tree, Solomon has learned many things about the life of insects, plants, and animals. After a fierce storm topples the maple, Solomon's uncle leads him through the process of creating a mask which brings to life all of the things that were special to Solomon.



372.35 S796

Start young! : early childhood science activities / McNair, Shannan (Ed.).

Arlington, VA: NSTA, 2006.

Subjects: Science – Study and teaching (Early childhood).

Summary: This book offers a wealth of simple educational activities designed to use right away with even the littlest scientists. Among the topics: playful science activities for young children; the science and mathematics of building structures; planning a rock day; what makes miniature sleds go, go, go; figuring out how big is big and how big is small; learning about birds, flight, ponds, and the environment; and creating science centres for all students.

507.1 S837

Stepping up to science and math: exploring the natural connections / Goldston, M. Jenice (Ed.). Arlington, VA: NSTA, 2004.

Subjects: Science – Study and teaching. Mathematics – Study and teaching.

Summary: This resource aims to assist teachers to rethink and reflect on how they teach mathematics and science. The book is organized around three content areas: making connections among basic concept skills that underpin both science and mathematics, using scientific concepts as the core for investigations to link to other subject areas, and finding contemporary applications for scientific inquiry and experimentation.

372.35 F533

The story goes on / Fisher, Aileen Lucia.

Brookfield, CT: Roaring Brook Press, 2005.

Subjects: Food chains (Ecology) – Juvenile literature. Children's poetry.

Summary: Using poetry, Fisher describes the cycle of life. A seed hides in the soil until rain and sun make it sprout. Once the seed sprouts, it starts a new journey, beginning with a bug eating the leaf. The bug is eaten by a frog, which is eaten by a snake, and so on. Finally, a sexton beetle buries what is left, and the seed hides in the soil until the rain and sun make it sprout.

372.357 S997

Take an ecowalk 1: to explore science concepts: grades 1-5 / Szeto, Sandy.

Toronto, ON: Trifolium Books, 2002.

Subjects: Natural history – Study and teaching (Elementary). Science – Study and teaching

(Elementary).

Summary: This resource offers background information for elementary level teachers, plus suggestions for pre- and post-walk classroom activities. It also provides samples of assessment tools such as rubrics.

333.72 K94

Taking care of Mother Earth / Kruger, Leanne Flett.

Penticton, BC: Theytus Books, 2009.

Subjects: Environmental protection – Juvenile literature. Grandparent and child – Juvenile literature.

Summary: A Métis grandmother teaches her young grandson about reusing, composting, and

sustaining Mother Earth's natural resources.

Uncovering Student Ideas in Science Series



507.1 K26

Uncovering student ideas in science : 25 formative assessment probes : volume 1 / Keeley, Page.

Eberle, Francis. Farrin, Lynn.

Arlington, VA: NSTA, 2005.

Subjects: Science – Study and teaching. Educational evaluation.

Summary: This book is comprised of 25 probes - brief, easily administered activities designed to determine your students' thinking on 44 core science topics (grouped by light, sound, matter, gravity, heat and temperature, life science, and Earth and space science). The probes are formative assessment tools to use before you begin teaching a topic or unit. The detailed teacher materials that accompany each probe review science content; give connections to National Science Education Standards and Benchmarks; present developmental considerations; summarize relevant research on learning; and suggest instructional approaches for elementary, middle, and high school students.



507.1 K26

Uncovering student ideas in science: 25 more formative assessment probes: volume 2 / Keeley,

Page. Eberle, Francis. Tugel, Joyce.

Arlington, VA: NSTA, 2007.

Subjects: Science – Study and teaching. Educational evaluation.

Summary: Topics include forms of matter, changes in matter, living things and life processes, rocks and landforms, the day/night cycle, and objects in the night sky.



507.1 K26

Uncovering student ideas in science: another 25 formative assessment probes: volume 3 /

Keeley, Page. Eberle, Francis. Dorsey, Chad.

Arlington, VA: NSTA, 2008.

Subjects: Science – Study and teaching. Educational evaluation.

Summary: This book offers five life science probes, seven earth and space science probes, ten physical science probes, and three nature-of-science probes.



507.1 K26

Uncovering student ideas in science: 25 new formative assessment probes: volume 4 / Keeley,

Page. Tugel, Joyce.

Arlington, VA: NSTA, 2009.

Subjects: Science – Study and teaching. Educational evaluation.

Summary: This book adds to the probes in physical, life, and earth and space science with a new category called "unifying principles". Also covered is a discussion on balancing formative assessment with summative assessment.

630 H688

Up we grow!: a year in the life of a small, local farm / Hodge, Deborah.

Toronto, ON: Kids Can Press, 2010.

Subjects: Farms, Small – Juvenile literature. Farm life – Juvenile literature. Sustainable agriculture – Juvenile literature.

Summary: Children learn about the role and importance of small, local farms. Using the four seasons, children will understand the workings of the farm from plowing, planting, composting, mulching, harvesting, marketing fruits and vegetables, and caring for the animals.

551.6 H313

Weather: discover why It storms, rains, snows, or shines / Harris, Caroline.

New York, NY: Kingfisher, 2009.

Subjects: Weather – Juvenile literature.

Summary: Water, air, and heat from the sun work together to make weather. Students will learn about the seasons, climate, extreme weather, and the future of weather.

591.722 S851

When rain falls / Stewart, Melissa.

Atlanta, GA: Peachtree Publishers, 2008.

Subjects: Rain and rainfall – Juvenile literature. Animal behavior – Juvenile literature.

Summary: The author examines the behaviour of animals in forests, fields, wetlands, and deserts when it rains. She briefly describes what some animals do within the specific habitat to keep dry, and identifies some of the adaptations that animals have developed.

372.35 M585

When the shadbush blooms / Messinger, Carla. Katz, Susan.

Berkeley, CA: Tricycle Press, 2007.

Subjects: Seasons – Juvenile fiction. Delaware Indians – Juvenile fiction. Indians of North America – Middle Atlantic States – Juvenile fiction.

Summary: In the past and present tense, Traditional Sister and Contemporary Sister discuss tradition and change. On one page of the book, Traditional Sister describes the season and what community members are doing. On the corresponding page, a contemporary look at the same moon cycle is illustrated. At the corner of each page is the name of each cycle in the Lenni Lenape language and in English. The back of the text includes information about the Lenni Lenape peoples, the seasons, and the Lenni Lenape culture as told by Traditional Sister.

SCIENCE GRADE 2



Indicates item is a Ministry of Education's Core Learning Resource.

Addison-Wesley Science & Technology 2



372.35 A227

All about animals / Harcourt, Lalie. Wortzman, Ricki.

In the kitchen / Harcourt, Lalie. Wortzman, Ricki.

Mechanics at work / Harcourt, Lalie. Wortzman, Ricki.

On the move / Harcourt, Lalie. Wortzman, Ricki.

Weather watch / Harcourt, Lalie. Wortzman, Ricki.

Addison Wesley science and technology, grade 2. Teacher's guide / Harcourt, Lalie. Wortzman, Ricki.

Don Mills, ON: Addison-Wesley, 2000.

Subjects: Science – Study and teaching (Primary). Mechanics – Juvenile literature. Wind power – Juvenile literature. Water power – Juvenile literature. Matter – Juvenile literature. Solids – Juvenile literature. Weather – Juvenile literature. Animals – Juvenile literature.

Summary: This science resource includes information, activities, and teacher support material that address all four units of Saskatchewan's Grade 2 science curriculum. The teacher's guide consists of a binder with separate modules for each topic. Each module includes a brief section of background information for the teacher, as well as learning expectations, materials, possible connections to other subject areas, and extension and assessment ideas.

372.35 R652

Air, water, and weather: stop faking it! / Robertson, William C.

Arlington, VA: NSTA Press, 2005.

Subjects: Weather. Air.

Summary: This book is designed to help you develop a deep understanding of the basics so you can teach without fear. The author starts with the basic properties of air and water, then helps you learn about pressure, the Coriolis force, the Bernoulli Effect, density, and provides explanations of why hot air doesn't rise all by itself and why heating air doesn't necessarily cause it to expand. These concepts form a foundation for explanations of weather patterns, including the jet stream, storm fronts, and the formation of tornadoes and hurricanes.

Animal Behaviour Series

591.56 H628

Animals and their mates: how animals attract, fight for and protect each other / Hickman, Pamela.

Toronto, ON: Kids Can Press, 2004.

Subjects: Courtship in animals – Juvenile literature. Sexual behavior in animals – Juvenile literature. Summary: This book explains how animals use various methods to attract a mate. The sexual

behaviour of some animals is also discussed.

598.072 B328

Backyard birds: an introduction / Bateman, Robert. Coutts, Ian K.

Markham, ON: Scholastic Canada, 2005.

Subjects: Bird watching – Juvenile literature. Birds – Juvenile literature.

Summary: Bateman introduces familiar birds to children. Each two-page spread includes a description a bird, its habitat, and bird facts. The opposite page is a painting of one bird, with a smaller illustration of another bird.

398.2 C338

The barefoot book of earth tales / Casey, Dawn.

Cambridge, MA: Barefoot Books, 2009.

Subjects: Tales. Ecology – Folklore.

Summary: In this collection of seven folktales, readers will discover how various cultures celebrate our connection with nature and will be reminded how important it is to take care of Mother Earth. The narratives will increase understanding of our relationship with the land, celebrate the beauty of the natural world, and share wisdom to take care of the Earth. Includes an "eco-activity" for each tale.

497.3 P187

The beaver's big house / Panas, J. D. Whitford, Olive.

Saskatoon, SK: Gabriel Dumont Institute, 2004.

Subjects: Cooperation – Juvenile fiction. Preparedness – Juvenile fiction.

Summary: Two beavers, Baptiste and Betsy, live in the forest. As they build their dam, other forest animals drop by and tell them not to work so hard. When a forest fire burns, the two beavers rally the other forest animals to battle the fire. Included with the book is a CD with an English and Michif narration of the text.

535.6 C848

The black book of colors / Cottin, Menena. Faria, Rosana.

Toronto, ON: Groundwood Books, 2008.

Subjects: Colors – Juvenile literature. Touch – Juvenile literature. Blind – Books and reading – Juvenile literature.

Summary: This book invites readers to imagine living without sight through remarkable illustrations done with raised lines and descriptions of colours based on imagery. Braille letters accompany the illustrations and a full Braille alphabet offers sighted readers help reading along with their fingers.



500.8997 A291

Bridging cultures : scientific and Indigenous ways of knowing nature / Aikenhead, Glen. Michell, Herman.

Toronto, ON: Pearson, 2011.

Subjects: Science – Study and teaching. Ethnoscience. Native peoples – Canada – Education. Indian philosophy.

Summary: The recognition of Indigenous knowledge as an important, legitimate source of understanding of the physical world is increasing within education jurisdictions worldwide. This book provides science educators with knowledgeable perspectives on scientific and Indigenous content.

363.7 S335

Children of the earth ... remember / Schimmel. Schim.

Minnetonka, MN: North Word Books, 1997.

Subjects: Earth – Juvenile literature. Environmental protection – Juvenile literature. Animals – Juvenile literature.

Summary: Out of love and concern for their planet, the animals and people of Mother Earth work together to protect the natural world.



372.35 B655

Creating a classroom community of young scientists (2nd ed.) / Bloom, Jeffrey W.

New York, NY: Routledge, 2006.

Subjects: Science – Study and teaching (Elementary).

Summary: The author approaches science education through an inquiry-based and activities-based method. Students are responsible for (and in control of) their own and others' learning. Features in the book include examples of classroom practice, questions for reflection, planning and implementing instruction, and suggestions on how to include technology in the science classroom.

791.4334 D539

Diary of a worm: ... and 4 more great animal tales [DVD]

Weston, CT: Weston Woods, 2006.

Subjects: Animals – Juvenile films. Children's films. Animated films.

Summary: The *Diary of a Worm* reveals how a young worm discovers, day by day, that there are some very good and some not so good things about being a worm in this great big world.

591.468 A857

An egg is quiet / Aston, Dianna Hutts.

San Francisco, CA: Chronicle Books, 2006.

Subjects: Embryology – Juvenile literature. Eggs – Juvenile literature.

Summary: Aston introduces over 60 different types of eggs to young children. She describes why some eggs are shaped a certain way, why some eggs use camouflage, and why some eggs are textured. She includes three life cycles of animals that start as an egg.

1

372.35 K98

Exploring safely: a guide for elementary teachers / Kwan, Terry. Texley, Juliana.

Arlington, VA: NSTA Press, 2005.

Subjects: Science – Study and teaching (Elementary) – Safety measures.

Summary: This resource relieves the many safety concerns that come with teaching elementary level science. The emphasis is on positive options for avoiding potential hazards. Chapters include making safe work habits second nature to students, equipping the classroom for safety, and choosing and culturing live plants and animals for classroom study.

Exploring the Elements Series

551.5 K16

Who likes the rain? / Kaner, Etta.

Toronto, ON: Kids Can Press, 2007.

Subjects: Rain and rainfall – Juvenile literature.

Summary: Young readers will discover why rain falls, what raindrops really look like, why the air smells different after a rain and much more.

551.5 K16

Who likes the snow? / Kaner, Etta.

Toronto, ON: Kids Can Press, 2006. Subjects: Snow – Juvenile literature.

Summary: Young readers will discover why snow is white, what snowflakes look like up close, how snow makes the night brighter and much more.

551.5 K16

Who likes the sun? / Kaner, Etta. Toronto, ON: Kids Can Press, 2006. Subjects: Sun – Juvenile literature. Summary: Students will discover how the sun makes shadows, why water sparkles in the sun, how the sun helps make rainbows and much more.

551.5 K16

Who likes the wind? / Kaner. Etta.

Toronto, ON: Kids Can Press, 2006. Subjects: Winds – Juvenile literature.

Summary: Students will discover why the wind blows, how leaves are blown from trees, where the wind blows a seed and much more.

372.35 R652

Force and motion: stop faking it! / Robertson, William C.

Arlington, VA: NSTA Press, 2002. Subjects: Motion. Force and energy.

Summary: This book describes how Isaac Newton viewed the relationship between forces and between forces and changes in motion. Other concepts that are examined include the force of gravity and circular motion. Most of the ideas presented in the resource are pulled together by describing how to get a rocket ship to the moon.

372.35 H236

Hands-on science 2 / Lawson, Jennifer.

Winnipeg, MB: Portage & Main Press, 1999.

Subjects: Science – Study and teaching (Primary).

Summary: The four unit titles are: Growth and Changes in Animals; Properties of Liquids, Solids, and Gases; Position and Motion; and Air and Water in the Environment. Each unit is divided into lessons that focus on specific curricular outcomes. Each lesson contains: materials lists, activity descriptions, questioning techniques, activity centre and extension ideas, assessment suggestions, and activity sheets and visuals.

791.4334 H772

Honey, honey ... lion! [DVD]

New York, NY: Spoken Arts, 2006.

Subjects: Sharing – Juvenile films. Children's films. Africa – Juvenile films.

Summary: Based on the picture book of the same title by Jan Brett, this video tells of a honeyguide bird who always leads an African Badger to honey. The badger works to claw the honeycomb out, and the partners share the honey. One day, the badger decides not to share with the honeyguide, and the bird retaliates by leading the badger to a lion. After nearly losing his life, the badger learns a valuable lesson.

598.417 S275

Honk, honk, goose!: Canada geese start a family / Sayre, April Pulley.

New York, NY: Henry Holt, 2009.

Subjects: Canada goose – Juvenile literature.

Summary: The roles of male and female geese that are starting a family are described. At the back of the book is additional information on the Canada goose, migrating and resident geese, and a suggestion for a budding scientist.

599.786 D256

Ice bear: in the steps of the polar bear / Davies, Nicola.

Cambridge, MA: Candlewick Press, 2005. Subjects: Polar bear – Juvenile literature.

Summary: This book describes how the polar bear, also called Nanuk, thrives in the Arctic and explains the lessons that the Inuit people have learned from watching the creature.

507.1 H224

Integrating science with mathematics & literacy: new visions for learning and assessment (2nd ed.) / Hammerman, Elizabeth. Musial, Diann.

Thousand Oaks, CA: Corwin Press, 2008.

Subjects: Science – Study and teaching – Activity programs. Science – Ability testing. Mathematics – Study and teaching. Language arts.

Summary: The authors provide suggestions to integrate science with mathematics and literacy. They encourage teachers to develop reliable processes for assessing both their teaching practice and student learning. Included in the book are over 20 performance assessments to promote student engagement. The assessments model inquiry-based science to allow learners to demonstrate their understanding of concepts through exploration, inquiry, and application.

The Land is Our Storybook Series

971.9300497 E61

The caribou feed our soul = ?etthen bet'a daghidda / Enzoe, Pete. Willett, Mindy.

Markham, ON: Fifth House, 2010.

Subjects: Lutsel K'e Dene First Nation – Biography – Juvenile literature. Caribou hunting – Northwest Territories – Juvenile literature. Chipewyan Indians – Hunting – Northwest Territories – Juvenile literature.

Summary: Pete takes readers on a respectful caribou harvest. Along the way, he shares creation stories about how his people are descendants of the caribou. He also describes the spiritual areas his community is trying to protect, including Thaidene Nene, which means "land of our ancestors." Pete's stories help the reader to understand the rich history of the Chipewyan Dene and their relationship with the caribou today.

971.9300497 Z85

Living stories = Godi weghàà ets'eèda / Zoe, Therese. Zoe, Philip. Willett, Mindy.

Markham, ON: Fifth House, 2009.

Subjects: Tlicho First Nation – History – Juvenile literature. Dogrib Indians – Juvenile literature. Summary: Join Tlicho youth as they learn about making dry-fish, bows & arrows, and birchbark baskets; the practices of medicine people; as well as the living stories that tell the history and laws of their people.

971.9300497 A555

We feel good out here = Zhik gwaa'an, nakhwatthaiitat gwiinzii / André, Julie-Ann. Willett, Mindy.

Markham, ON: Fifth House, 2008.

Subjects: Gwich'in Indians – Northwest Territories – Juvenile literature. Traditional ecological knowledge – Northwest Territories – Juvenile literature.

Summary: This is the story of Julie-Ann André. She is a Canadian Ranger, a mother, a hunter, a trapper, a business owner, and a student. In this book, she shares her family's story and the story of her land - Khaii Luk, the place of winter wish.

578.737 G944

Life in the boreal forest / Guiberson, Brenda Z.

New York, NY: Henry Holt, 2009.

Subjects: Taiga ecology – Juvenile literature.

Summary: The boreal forest is buried in ice and snow during winter. But in summer lakes teem with fish, and bogs swarm with insects. Follow a snowshoe hare, beavers, a lynx, and other animals as they survive a year in this endangered landscape.

Looking Closely Series

372.35 S481

Across the desert / Serafini, Frank Toronto, ON: Kids Can Press, 2008.

Subjects: Desert biology – Juvenile literature.

Summary: Readers are first challenged to guess the identity of each close-up photograph. The next page reveals the entire photograph of the plant, animal or natural object accompanied by a simple but detailed description of the habitat.

372.35 S481

Along the shore / Serafini, Frank Toronto, ON: Kids Can Press, 2008.

Subjects: Seashore biology – Juvenile literature.

Summary: Readers are first challenged to guess the identity of each close-up photograph. The next page reveals the entire photograph of the plant, animal or natural object accompanied by a simple but detailed description of the habitat.

372.35 S481

Around the pond / Serafini, Frank

Toronto, ON: Kids Can Press, 2010.

Subjects: Pond plants – Juvenile literature. Pond animals – Juvenile literature.

Summary: Readers are first challenged to guess the identity of each close-up photograph. The next page reveals the entire photograph of the plant, animal or natural object accompanied by a simple but detailed description of the habitat.

372.35 S481

Inside the garden / Serafini, Frank

Toronto, ON: Kids Can Press, 2008.

Subjects: Plants – Juvenile literature. Garden animals – Juvenile literature.

Summary: Readers are first challenged to guess the identity of each close-up photograph. The next page reveals the entire photograph of the plant, animal or natural object accompanied by a simple but detailed description of the habitat.

372.35 S481

Through the forest / Serafini, Frank

Toronto, ON: Kids Can Press, 2008.

Subjects: Forest plants – Juvenile literature. Forest animals – Juvenile literature.

Summary: Readers are first challenged to guess the identity of each close-up photograph. The next page reveals the entire photograph of the plant, animal or natural object accompanied by a simple but detailed description of the habitat.

530 G458

Materials: liquids, solids, and gases: their properties and uses / Gifford, Clive.

Boston, MA: Kingfisher, 2005.

Subjects: Matter – Juvenile literature. Materials – Juvenile literature.

Summary: Students will learn why some materials sink or float, other materials can be bent or stretched, and some materials can be used as building blocks. At the end of the book are activities for students to try using various materials that can be found at school or in the home.



372.35 M685

Mixing it up: integrated, interdisciplinary, intriguing science in the elementary classroom Arlington, VA: NSTA Press, 2003.

Subjects: Science – Study and teaching (Elementary). Interdisciplinary approach in education. Summary: This resource provides over 25 suggestions to assist educators in combining concepts and processes within the sciences or among the disciplines. The book is divided into two sections: helping students build connections and school and community connections.

398.208997 C691

Niiwin: four Ojibwa critter tales / Coleclough, Kathleen.

Riceton, SK: Kakwa Publishing, 2006.

Subjects: Ojibwa Indians – Folklore. Nanabush (Legendary character) – Legends.

Summary: A group of Elders are berry picking, and Antoinette becomes separated from the group. As Antoinette picks berries, she sees four animals and tells a narrative about each animal. There is a brief introduction where Coleclough introduces the importance of Elders, storytelling, and Nanabozho, who is a spirit in human form. Teachers may consider inviting an Elder or traditional knowledge keeper into the classroom to tell the narratives.

372.357 C689

On Meadowview Street / Cole, Henry.

New York, NY: Greenwillow Books, 2007.

Subjects: Nature – Juvenile fiction. Meadows – Juvenile fiction.

Summary: Upon moving to a new house, young Caroline and her parents encourage wildflowers to grow and birds and animals to stay in their yard, which soon has the whole suburban street living up to its name.

598.97 H673

Ookpik: the travels of a snowy owl / Hiscock, Bruce.

Honesdale, PA: Boyds Mills Press, 2008.

Subjects: Snowy owl – Juvenile literature. Snowy owl – Migration.

Summary: The first year of life of a snowy owl is described. Ookpik hatches in the Arctic during spring. He grows quickly during the short summer season. When autumn arrives, Ookpik instinctively knows that he must leave the Arctic or starve. The author describes Ookpik's journey south. He sees things for the first time, such as trees. Natural surroundings are changing as Ookpik travels from the barren Arctic to the taiga, and finally arrives at his destination in the Adirondack Mountains.

Pan-Canadian Science Place 2



551.5 C951

Air and water / Cross, Gary.

Air and water: teacher's guide / Cross, Gary.

Toronto, ON: Scholastic, 2000.

Subjects: Air – Study and teaching (Primary). Water – Study and teaching (Primary). Summary: This book presents science lessons related to air and water in the environment.



571.871 C951

Animals grow / Cross, Gary.

Animals grow: teacher's guide / Cross, Gary.

Toronto, ON: Scholastic, 2000.

Subjects: Growth – Study and teaching (Primary).

Summary: This book presents science lessons related to growth and changes in animals.



530.4 C951

Matter, matter everywhere / Cross, Gary.

Matter, matter everywhere: teacher's guide / Cross, Gary.

Toronto, ON: Scholastic, 2000.

Subjects: Matter – Study and teaching (Primary). Matter – Properties – Study and teaching (Primary).

Summary: This book presents science lessons related to the properties of liquids and solids.



531.11 C951

Move it! / Cross, Gary.

Move it!: teacher's guide / Cross, Gary.

Toronto, ON: Scholastic, 2000.

Subjects: Motion – Study and teaching (Primary).

Summary: This book presents science lessons related to movement.



371.102 P887

Powerful learning: what we know about teaching for understanding / Darling-Hammond, Linda.

San Francisco, CA: Jossey-Bass, 2008.

Subjects: Learning. Effective teaching.

Summary: The authors provide a number of teaching practices including project-based learning, cooperative learning, performance-based assessment, as well as instructional strategies in literacy, mathematics, and science.

Primary Physical Science Series

372.35 M398

Change it!: solids, liquids, gases and you / Mason, Adrienne.

Toronto, ON: Kids Can Press, 2006.

Subjects: Matter – Properties – Juvenile literature.

Summary: The author takes the physics of matter - solids, liquids and gases - and transforms it into an enjoyable and easy-to-understand science book.

372.35 M398

Touch it!: materials, matter and you / Mason, Adrienne.

Toronto, ON: Kids Can Press, 2005.

Subjects: Matter – Properties – Juvenile literature. Materials – Juvenile literature.

Summary: This book follows science curricula and is loaded with surprising facts and hands-on activities designed to hold young readers' interest and tap into their fascination with the everyday world. It explores materials - their colour, shape, texture, size, mass, magnetism and more.

577.34 J67

Rain forest / Johnson, Jinny May.

Boston, MA: Kingfisher, 2006.

Subjects: Rain forests – Juvenile literature.

Summary: This book introduces the animals and plants that live in the rain forest. In the first section, Dr. Nalini introduces the humid forest floor. In the second section, Dr. Nalini prepares to climb towards the rain forest canopy. She discusses the climbers and clingers, gliders, and how to get to the

top of the canopy. Dr. Nalini also discusses human life in the rain forest and adaptations people have made to live in the environment.

372.35 R287

Readings in science methods, K-8 / Brunsell, Eric (Ed.).

Arlington, VA: NSTA Press, 2008.

Subjects: Science – Study and teaching (Elementary). Science – Study and teaching (Middle school). Summary: This collection of NSTA journal articles allows practising teachers to reflect upon what is already known in their science teaching. The contributors provide suggestions for new approaches to teach classroom science.

507.1 S128

Safety in the science classroom: kindergarten to grade 12

Edmonton, AB: Alberta Education, 2006.

 $Subjects: Science-Study \ and \ teaching-Safety \ measures. \ Safety \ education. \ Safety \ measures.$

Science rooms and equipment – Safety measures.

Summary: This is a comprehensive manual regarding science safety. While Part A focuses on general safety management, Part B contains specific information around safety, storage, and management of chemical, biological, and physical hazards in the classroom relevant to science teachers at all grade levels. Appendices include examples of science safety rules and procedures, sample student safety contracts, and a chemical laboratory safety inspection checklist.

813.6 H236

Sandy's incredible shrinking footprint / Handy, Femida. Carpenter, Carole.

Toronto, ON: Second Story Press, 2010.

Subjects: Nature – Effect of human beings on – Juvenile fiction. Recycling (Waste, etc.) – Juvenile fiction. Environmental protection – Juvenile fiction.

Summary: Sandy loves to visit her grandpa's house by the beach. Sandy and her dog, Pepper, play in the sand. One day her walk to the beach is ruined as it is littered with garbage. Sandy meets the "Garbage Lady" who keeps the beach clean by recycling materials found on the beach. Along the way, she teaches Sandy about her "footprint". Sandy discovers that by recycling and reusing items, she is shrinking her footprint.



372.35 S796

Start young! : early childhood science activities / McNair, Shannan (Ed.).

Arlington, VA: NSTA, 2006.

Subjects: Science – Study and teaching (Early childhood).

Summary: This book offers a wealth of simple educational activities designed to use right away with even the littlest scientists. Among the topics: playful science activities for young children; the science and mathematics of building structures; planning a rock day; what makes miniature sleds go, go, go; figuring out how big is big and how big is small; learning about birds, flight, ponds, and the environment; and creating science centres for all students.

507.1 S837

Stepping up to science and math: exploring the natural connections / Goldston, M. Jenice (Ed.). Arlington, VA: NSTA, 2004.

Subjects: Science – Study and teaching. Mathematics – Study and teaching.

Summary: This resource aims to assist teachers to rethink and reflect on how they teach mathematics and science. The book is organized around three content areas: making connections among basic concept skills that underpin both science and mathematics, using scientific concepts as the core for

investigations to link to other subject areas, and finding contemporary applications for scientific inquiry and experimentation.

372.35 F533

The story goes on / Fisher, Aileen Lucia.

Brookfield, CT: Roaring Brook Press, 2005.

Subjects: Food chains (Ecology) – Juvenile literature. Children's poetry.

Summary: Using poetry, Fisher describes the cycle of life. A seed hides in the soil until rain and sun make it sprout. Once the seed sprouts, it starts a new journey, beginning with a bug eating the leaf. The bug is eaten by a frog, which is eaten by a snake, and so on. Finally, a sexton beetle buries what is left, and the seed hides in the soil until the rain and sun make it sprout.

811.54 S957

The sun in me: poems about the planet / compiled by Judith Nicholls.

New York, NY: Barefoot Books, 2003.

Subjects: Children's poetry. Nature – Juvenile poetry.

Summary: In this collection of poems, readers will discover how poets celebrate the beauty and fragility of earth. Based on culture and homeland, the poets reflect on what the planet means to them.

372.357 S997

Take an ecowalk 1: to explore science concepts: grades 1-5 / Szeto, Sandy.

Toronto, ON: Trifolium Books, 2002.

Subjects: Natural history – Study and teaching (Elementary). Science – Study and teaching

(Elementary).

Summary: This resource offers background information for elementary level teachers, plus suggestions for pre- and post-walk classroom activities. It also provides samples of assessment tools such as rubrics.

Uncovering Student Ideas in Science Series



507.1 K26

Uncovering student ideas in science : 25 formative assessment probes : volume 1 / Keeley, Page. Eberle, Francis. Farrin, Lynn.

Arlington, VA: NSTA, 2005.

Subjects: Science – Study and teaching. Educational evaluation.

Summary: This book is comprised of 25 probes - brief, easily administered activities designed to determine your students' thinking on 44 core science topics (grouped by light, sound, matter, gravity, heat and temperature, life science, and Earth and space science). The probes are formative assessment tools to use before you begin teaching a topic or unit. The detailed teacher materials that accompany each probe review science content; give connections to National Science Education Standards and Benchmarks; present developmental considerations; summarize relevant research on learning; and suggest instructional approaches for elementary, middle, and high school students.



507.1 K26

Uncovering student ideas in science: 25 more formative assessment probes: volume 2 / Keeley, Page. Eberle, Francis. Tugel, Joyce.

Arlington, VA: NSTA, 2007.

Subjects: Science – Study and teaching. Educational evaluation.

Summary: Topics include forms of matter, changes in matter, living things and life processes, rocks and landforms, the day/night cycle, and objects in the night sky.



Uncovering student ideas in science: another 25 formative assessment probes: volume 3/

Keeley, Page. Eberle, Francis. Dorsey, Chad.

Arlington, VA: NSTA, 2008.

Subjects: Science – Study and teaching. Educational evaluation.

Summary: This book offers five life science probes, seven earth and space science probes, ten

physical science probes, and three nature-of-science probes.



507.1 K26

Uncovering student ideas in science: 25 new formative assessment probes: volume 4 / Keeley, Page. Tugel, Joyce.

Arlington, VA: NSTA, 2009.

Subjects: Science – Study and teaching. Educational evaluation.

Summary: This book adds to the probes in physical, life, and earth and space science with a new category called "unifying principles". Also covered is a discussion on balancing formative assessment with summative assessment.

551.6 H313

Weather: discover why It storms, rains, snows, or shines / Harris, Caroline.

New York, NY: Kingfisher, 2009.

Subjects: Weather – Juvenile literature.

Summary: Water, air, and heat from the sun work together to make weather. Students will learn about the seasons, climate, extreme weather, and the future of weather.

591.722 S851

When rain falls / Stewart, Melissa.

Atlanta, GA: Peachtree Publishers, 2008.

Subjects: Rain and rainfall – Juvenile literature. Animal behavior – Juvenile literature.

Summary: The author examines the behaviour of animals in forests, fields, wetlands, and deserts when it rains. She briefly describes what some animals do within the specific habitat to keep dry, and identifies some of the adaptations that animals have developed.

636.213 A761

Where beef comes from / Grant, Avery.

Regina, SK: Saskatchewan Stock Growers Association, 2010.

Subjects: Beef industry – Juvenile literature. Beef cattle – Juvenile literature.

Summary: Children will learn about the beef industry in this book. Starting with the birth of calves, students will learn that cattle are ruminants, cattle provide nutrients to the soil through manure, and weaning occurs from the females in fall. As the calves grow, they are taken to a feedlot. The beef production process is described: inspection of meat, different cuts of beef, and the nutrients beef has for human development.

SCIENCE GRADE 3



Indicates item is a Ministry of Education's Core Learning Resource.

398.2 C338

The barefoot book of earth tales / Casey, Dawn.

Cambridge, MA: Barefoot Books, 2009. Subjects: Tales. Ecology – Folklore.

Summary: In this collection of seven folktales, readers will discover how various cultures celebrate our connection with nature and will be reminded how important it is to take care of Mother Earth. The narratives will increase understanding of our relationship with the land, celebrate the beauty of the natural world, and share wisdom to take care of the Earth. Includes an "eco-activity" for each tale.

641.815 B828

Bread comes to life: a garden of wheat and a loaf to eat [DVD]

Norwalk, CT: Scholastic, 2003.

Subjects: Bread – Juvenile films. Wheat – Juvenile films.

Summary: This program tells the story of the sowing, growing, reaping, threshing, milling, mixing, shaping, kneading, rising, baking, and breaking of daily bread. Viewers observe the work of a small town baker. They also visit a large farm, a giant mill, and a large commercial bakery.



500.8997 A291

Bridging cultures : scientific and Indigenous ways of knowing nature / Aikenhead, Glen. Michell, Herman.

Toronto, ON: Pearson, 2011.

Subjects: Science – Study and teaching. Ethnoscience. Native peoples – Canada – Education. Indian philosophy.

Summary: The recognition of Indigenous knowledge as an important, legitimate source of understanding of the physical world is increasing within education jurisdictions worldwide. This book provides science educators with knowledgeable perspectives on scientific and Indigenous content.

363.7 S335

Children of the earth ... remember / Schimmel, Schim.

Minnetonka, MN: North Word Books, 1997.

Subjects: Earth – Juvenile literature. Environmental protection – Juvenile literature. Animals – Juvenile literature.

Summary: Out of love and concern for their planet, the animals and people of Mother Earth work together to protect the natural world.

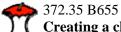
609.51 Y37

The Chinese thought of it: amazing inventions and innovations / Ye, Ting-xing.

Toronto, ON: Annick Press, 2009.

Subjects: Inventions – China – History – Juvenile literature. Technology – China – History – Juvenile literature. China – Antiquities – Juvenile literature.

Summary: The Chinese people used the resources around them to improve their lives. Travel and trade were facilitated with the development of the paddleboat. The dragon-spine water lift allowed the Chinese to move water from the river to a field or reservoir. The Chinese were among the first to invent processes for working with metal. Health and healing practices, such as inoculations, are believed to be used as early as the 10th century CE.



Creating a classroom community of young scientists (2nd ed.) / Bloom, Jeffrey W.

New York, NY: Routledge, 2006.

Subjects: Science – Study and teaching (Elementary).

Summary: The author approaches science education through an inquiry-based and activities-based method. Students are responsible for (and in control of) their own and others' learning. Features in the book include examples of classroom practice, questions for reflection, planning and implementing instruction, and suggestions on how to include technology in the science classroom.

791.4334 C975

The curious garden [DVD]

Norwalk, CT: Weston Woods, 2010.

Subjects: Gardening – Juvenile films. City and town life – Juvenile films.

Summary: In this animated DVD program, Liam lives in a city that is dark and grey. While exploring one day, Liam discovers a stairwell that leads to old railroad tracks. Among the tracks is a patch of dying wildflowers. Liam decides to take care of the garden. He learns to water and prune the plants. As the garden starts to spread, the city is transformed into a colourful world.

372.357 D571

Dig in!: hands-on soil investigations

Arlington, VA: NSTA, 2001.

Subjects: Soils – Study and teaching (Primary). Soil conservation – Study and teaching (Primary). Soil science – Study and teaching (Primary).

Summary: This resource aims to assist teachers to involve their students in earth science activities. The book is divided into four sections: What is soil? Who uses soil? What lives in soil? and Where is our soil going? Each section includes an overview, suggested lessons, required materials, evaluation, and extension ideas.

372.35 R652

Electricity and magnetism : stop faking it! : finally understanding science so you can teach it / Robertson, William C.

Arlington, VA: NSTA Press, 2005. Subjects: Electricity. Magnetism.

Summary: This resource contains information and activities on electricity, circuits and electronics, and magnetism. This guide addresses teachers' concerns about content and helps to fill in any gaps of understanding that may exist. Emphasis is on "getting" the science rather than memorizing facts and formulas.



372.35 K98

Exploring safely: a guide for elementary teachers / Kwan, Terry. Texley, Juliana.

Arlington, VA: NSTA Press, 2005.

Subjects: Science – Study and teaching (Elementary) – Safety measures.

Summary: This resource relieves the many safety concerns that come with teaching elementary level science. The emphasis is on positive options for avoiding potential hazards. Chapters include making safe work habits second nature to students, equipping the classroom for safety, and choosing and culturing live plants and animals for classroom study.

577.24 G586

Fire! : The renewal of a forest / Godkin, Celia. Markham, ON: Fitzhenry & Whiteside, 2006.

Subjects: Fire ecology – Juvenile literature. Forest fires – Juvenile literature. Forest ecology – Juvenile literature.

Summary: The forest has been dry and scorched for weeks. One afternoon, a hot wind blows and storm clouds gather. Lightning strikes a tree in the meadow and ignites the dry vegetation. No life remains in the burnt forest. As the years slowly pass, seeds start to germinate and small creatures inhabit the forest. Students will learn that fire is sometimes good for the regeneration of forests.

372.35 R652

Force and motion: stop faking it! / Robertson, William C.

Arlington, VA: NSTA Press, 2002. Subjects: Motion. Force and energy.

Summary: This book describes how Isaac Newton viewed the relationship between forces and between forces and changes in motion. Other concepts that are examined include the force of gravity and circular motion. Most of the ideas presented in the resource are pulled together by describing how to get a rocket ship to the moon.

507.1 H224

Integrating science with mathematics & literacy: new visions for learning and assessment (2nd ed.) / Hammerman, Elizabeth. Musial, Diann.

Thousand Oaks, CA: Corwin Press, 2008.

Subjects: Science – Study and teaching – Activity programs. Science – Ability testing. Mathematics – Study and teaching. Language arts.

Summary: The authors provide suggestions to integrate science with mathematics and literacy. They encourage teachers to develop reliable processes for assessing both their teaching practice and student learning. Included in the book are over 20 performance assessments to promote student engagement. The assessments model inquiry-based science to allow learners to demonstrate their understanding of concepts through exploration, inquiry, and application.

578.737 G944

Life in the boreal forest / Guiberson, Brenda Z.

New York, NY: Henry Holt, 2009.

Subjects: Taiga ecology – Juvenile literature.

Summary: The boreal forest is buried in ice and snow during winter. But in summer lakes teem with fish, and bogs swarm with insects. Follow a snowshoe hare, beavers, a lynx, and other animals as they survive a year in this endangered landscape.

Looking Closely Series

372.35 S481

Across the desert / Serafini, Frank Toronto, ON: Kids Can Press, 2008.

Subjects: Desert biology – Juvenile literature.

Summary: Readers are first challenged to guess the identity of each close-up photograph. The next page reveals the entire photograph of the plant, animal or natural object accompanied by a simple but detailed description of the habitat.

372.35 S481

Along the shore / Serafini, Frank Toronto, ON: Kids Can Press, 2008.

Subjects: Seashore biology – Juvenile literature.

Summary: Readers are first challenged to guess the identity of each close-up photograph. The next page reveals the entire photograph of the plant, animal or natural object accompanied by a simple but detailed description of the habitat.

372.35 S481

Around the pond / Serafini, Frank

Toronto, ON: Kids Can Press, 2010.

Subjects: Pond plants – Juvenile literature. Pond animals – Juvenile literature.

Summary: Readers are first challenged to guess the identity of each close-up photograph. The next page reveals the entire photograph of the plant, animal or natural object accompanied by a simple but detailed description of the habitat.

372.35 S481

Inside the garden / Serafini, Frank

Toronto, ON: Kids Can Press, 2008.

Subjects: Plants – Juvenile literature. Garden animals – Juvenile literature.

Summary: Readers are first challenged to guess the identity of each close-up photograph. The next page reveals the entire photograph of the plant, animal or natural object accompanied by a simple but detailed description of the habitat.

372.35 S481

Through the forest / Serafini, Frank

Toronto, ON: Kids Can Press, 2008.

Subjects: Forest plants – Juvenile literature. Forest animals – Juvenile literature.

Summary: Readers are first challenged to guess the identity of each close-up photograph. The next page reveals the entire photograph of the plant, animal or natural object accompanied by a simple but detailed description of the habitat.

530 G458

Materials: liquids, solids, and gases: their properties and uses / Gifford, Clive.

Boston, MA: Kingfisher, 2005.

Subjects: Matter – Juvenile literature. Materials – Juvenile literature.

Summary: Students will learn why some materials sink or float, other materials can be bent or stretched, and some materials can be used as building blocks. At the end of the book are activities for students to try using various materials that can be found at school or in the home.



372.35 M685

Mixing it up: integrated, interdisciplinary, intriguing science in the elementary classroom Arlington, VA: NSTA Press, 2003.

Subjects: Science – Study and teaching (Elementary). Interdisciplinary approach in education. Summary: This resource provides over 25 suggestions to assist educators in combining concepts and processes within the sciences or among the disciplines. The book is divided into two sections: helping students build connections and school and community connections.

372.357 C689

On Meadowview Street / Cole, Henry.

New York, NY: Greenwillow Books, 2007.

Subjects: Nature – Juvenile fiction. Meadows – Juvenile fiction.

Summary: Upon moving to a new house, young Caroline and her parents encourage wildflowers to grow and birds and animals to stay in their yard, which soon has the whole suburban street living up to its name.



372.35 P361

Pearson Saskatchewan science 3 / Aspen-Baxter, Linda.

Toronto, ON: Pearson Education, 2012.

Subjects: Science - Textbooks.

Summary: Each unit starts with a list of "Big Ideas" that set the focus for the unit. A Big Idea then provides the title for each section in the unit. Throughout the unit, opportunities are provided for students to work together, communicate ideas, perform experiments, and carry out library and Internet research.



372.35 A617

Picture-perfect science lessons: using children's books to guide inquiry, 3-6 (2nd ed.) / Ansberry, Karen Rohrich. Morgan, Emily.

Arlington, VA: NSTA Press, 2010.

Subjects: Science – Study and teaching (Elementary). Picture books for children.

Summary: The authors provide 15 science lessons to teach inquiry-based science using literary texts. Each lesson contains engagement activities, hands-on explorations, student pages, suggestions for student and teacher explanations, opportunities for enrichment, assessment strategies, and annotated bibliographies of suggested resources. The lessons cover life science, physical science, and earth science.

333.72 N735

Planting the trees of Kenya: the story of Wangari Maathai / Nivola, Claire A.

New York, NY: Farrar, 2008.

Subjects: Women conservationists – Kenya – Biography – Juvenile literature. Tree planters (Persons) – Kenya – Biography – Juvenile literature. Women politicians – Kenya – Biography – Juvenile literature.

Summary: Wangari Maathai grew up in the Kenyan highlands. Fig trees covered the hills, fish were abundant in the streams, and people tended their own gardens. After attending college in the U.S., Wangari returns to a changed Kenya. The trees are gone, the people are malnourished, and the village gardens are dry. In 1977, Wangari begins the Green Belt Movement, where individuals learn to care for the environment. She received the Nobel Peace Prize in 2004.



371.102 P887

Powerful learning: what we know about teaching for understanding / Darling-Hammond, Linda. San Francisco, CA: Jossey-Bass, 2008.

Subjects: Learning. Effective teaching.

Summary: The authors provide a number of teaching practices including project-based learning, cooperative learning, performance-based assessment, as well as instructional strategies in literacy, mathematics, and science.

577.34 J67

Rain forest / Johnson, Jinny May. Boston, MA: Kingfisher, 2006.

Subjects: Rain forests – Juvenile literature.

Summary: This book introduces the animals and plants that live in the rain forest. In the first section, Dr. Nalini introduces the humid forest floor. In the second section, Dr. Nalini prepares to climb towards the rain forest canopy. She discusses the climbers and clingers, gliders, and how to get to the top of the canopy. Dr. Nalini also discusses human life in the rain forest and adaptations people have made to live in the environment.

372.35 R287

Readings in science methods, K-8 / Brunsell, Eric (Ed.).

Arlington, VA: NSTA Press, 2008.

Subjects: Science – Study and teaching (Elementary). Science – Study and teaching (Middle school). Summary: This collection of NSTA journal articles allows practising teachers to reflect upon what is already known in their science teaching. The contributors provide suggestions for new approaches to teach classroom science.

507.1 S128

Safety in the science classroom: kindergarten to grade 12

Edmonton, AB: Alberta Education, 2006.

Subjects: Science – Study and teaching – Safety measures. Safety education. Safety measures. Science rooms and equipment – Safety measures.

Summary: This is a comprehensive manual regarding science safety. While Part A focuses on general safety management, Part B contains specific information around safety, storage, and management of chemical, biological, and physical hazards in the classroom relevant to science teachers at all grade levels. Appendices include examples of science safety rules and procedures, sample student safety contracts, and a chemical laboratory safety inspection checklist.

813.6 H236

Sandy's incredible shrinking footprint / Handy, Femida. Carpenter, Carole.

Toronto, ON: Second Story Press, 2010.

Subjects: Nature – Effect of human beings on – Juvenile fiction. Recycling (Waste, etc.) – Juvenile fiction. Environmental protection – Juvenile fiction.

Summary: Sandy loves to visit her grandpa's house by the beach. Sandy and her dog, Pepper, play in the sand. One day her walk to the beach is ruined as it is littered with garbage. Sandy meets the "Garbage Lady" who keeps the beach clean by recycling materials found on the beach. Along the way, she teaches Sandy about her "footprint". Sandy discovers that by recycling and reusing items, she is shrinking her footprint.

731.75 S734

Solomon's tree / Spalding, Andrea.

Victoria, BC: Orca, 2002.

Subjects: Tsimshian masks – Juvenile literature. Tsimshian Indians – Juvenile literature.

Summary: On the West Coast of Canada, Solomon has developed a special relationship with a large maple tree in his yard. Through the tree, Solomon has learned many things about the life of insects, plants, and animals. After a fierce storm topples the maple, Solomon's uncle leads him through the process of creating a mask which brings to life all of the things that were special to Solomon.

507.1 S837

Stepping up to science and math: exploring the natural connections / Goldston, M. Jenice (Ed.). Arlington, VA: NSTA, 2004.

Subjects: Science – Study and teaching. Mathematics – Study and teaching.

Summary: This resource aims to assist teachers to rethink and reflect on how they teach mathematics and science. The book is organized around three content areas: making connections among basic concept skills that underpin both science and mathematics, using scientific concepts as the core for investigations to link to other subject areas, and finding contemporary applications for scientific inquiry and experimentation.

372.35 F533

The story goes on / Fisher, Aileen Lucia.

Brookfield, CT: Roaring Brook Press, 2005.

Subjects: Food chains (Ecology) – Juvenile literature. Children's poetry.

Summary: Using poetry, Fisher describes the cycle of life. A seed hides in the soil until rain and sun make it sprout. Once the seed sprouts, it starts a new journey, beginning with a bug eating the leaf. The bug is eaten by a frog, which is eaten by a snake, and so on. Finally, a sexton beetle buries what is left, and the seed hides in the soil until the rain and sun make it sprout.

811.54 S957

The sun in me : poems about the planet / compiled by Judith Nicholls.

New York, NY: Barefoot Books, 2003.

Subjects: Children's poetry. Nature – Juvenile poetry.

Summary: In this collection of poems, readers will discover how poets celebrate the beauty and fragility of earth. Based on culture and homeland, the poets reflect on what the planet means to them.

372.357 S997

Take an ecowalk 1: to explore science concepts: grades 1-5 / Szeto, Sandy.

Toronto, ON: Trifolium Books, 2002.

Subjects: Natural history – Study and teaching (Elementary). Science – Study and teaching

(Elementary).

Summary: This resource offers background information for elementary level teachers, plus suggestions for pre- and post-walk classroom activities. It also provides samples of assessment tools such as rubrics.

<u>Uncovering Student Ideas in Science Series</u>



507.1 K26

Uncovering student ideas in science: 25 formative assessment probes: volume 1 / Keeley, Page. Eberle, Francis. Farrin, Lynn.

Arlington, VA: NSTA, 2005.

Subjects: Science – Study and teaching. Educational evaluation.

Summary: This book is comprised of 25 probes - brief, easily administered activities designed to determine your students' thinking on 44 core science topics (grouped by light, sound, matter, gravity, heat and temperature, life science, and Earth and space science). The probes are formative assessment tools to use before you begin teaching a topic or unit. The detailed teacher materials that accompany each probe review science content; give connections to National Science Education Standards and Benchmarks; present developmental considerations; summarize relevant research on learning; and suggest instructional approaches for elementary, middle, and high school students.



507.1 K26

Uncovering student ideas in science: 25 more formative assessment probes: volume 2 / Keeley, Page. Eberle, Francis. Tugel, Joyce.

Arlington, VA: NSTA, 2007.

Subjects: Science – Study and teaching. Educational evaluation.

Summary: Topics include forms of matter, changes in matter, living things and life processes, rocks and landforms, the day/night cycle, and objects in the night sky.



507.1 K26

Uncovering student ideas in science : another 25 formative assessment probes : volume 3 \slash

Keeley, Page. Eberle, Francis. Dorsey, Chad.

Arlington, VA: NSTA, 2008.

Subjects: Science – Study and teaching. Educational evaluation.

Summary: This book offers five life science probes, seven earth and space science probes, ten physical science probes, and three nature-of-science probes.



507.1 K26

Uncovering student ideas in science: 25 new formative assessment probes: volume 4 / Keeley, Page. Tugel, Joyce.

Arlington, VA: NSTA, 2009.

Subjects: Science – Study and teaching. Educational evaluation.

Summary: This book adds to the probes in physical, life, and earth and space science with a new category called "unifying principles". Also covered is a discussion on balancing formative assessment with summative assessment.

372.35 M585

When the shadbush blooms / Messinger, Carla. Katz, Susan.

Berkeley, CA: Tricycle Press, 2007.

Subjects: Seasons – Juvenile fiction. Delaware Indians – Juvenile fiction. Indians of North America – Middle Atlantic States – Juvenile fiction.

Summary: In the past and present tense, Traditional Sister and Contemporary Sister discuss tradition and change. On one page of the book, Traditional Sister describes the season and what community members are doing. On the corresponding page, a contemporary look at the same moon cycle is illustrated. At the corner of each page is the name of each cycle in the Lenni Lenape language and in English. The back of the text includes information about the Lenni Lenape peoples, the seasons, and the Lenni Lenape culture as told by Traditional Sister.

SCIENCE GRADE 4



Indicates item is a Ministry of Education's Core Learning Resource.

398.2 C338

The barefoot book of earth tales / Casey, Dawn.

Cambridge, MA: Barefoot Books, 2009. Subjects: Tales. Ecology – Folklore.

Summary: In this collection of seven folktales, readers will discover how various cultures celebrate our connection with nature and will be reminded how important it is to take care of Mother Earth. The narratives will increase understanding of our relationship with the land, celebrate the beauty of the natural world, and share wisdom to take care of the Earth. Includes an "eco-activity" for each tale.

497.3 P187

The beaver's big house / Panas, J. D. Whitford, Olive.

Saskatoon, SK: Gabriel Dumont Institute, 2004.

Subjects: Cooperation – Juvenile fiction. Preparedness – Juvenile fiction.

Summary: Two beavers, Baptiste and Betsy, live in the forest. As they build their dam, other forest animals drop by and tell them not to work so hard. When a forest fire burns, the two beavers rally the other forest animals to battle the fire. Included with the book is a CD with an English and Michif narration of the text.

372.35 T512

Before and after: a book of nature timescapes / Thornhill, Jan.

Toronto, ON: Maple Tree Press, 2005.

Subjects: Habitat (Ecology) – Juvenile literature.

Summary: Thornhill examines changes in habitats using measures of time. Children observe changes in a tropical coral reef, an African savannah, the Australian forest edge, a wetland, a meadow, a South American rainforest, and a schoolyard.



500.8997 A291

Bridging cultures : scientific and Indigenous ways of knowing nature / Aikenhead, Glen. Michell, Herman

Toronto, ON: Pearson, 2011.

Subjects: Science – Study and teaching. Ethnoscience. Native peoples – Canada – Education. Indian philosophy.

Summary: The recognition of Indigenous knowledge as an important, legitimate source of understanding of the physical world is increasing within education jurisdictions worldwide. This book provides science educators with knowledgeable perspectives on scientific and Indigenous content.

577.68 C316

The bulrush helps the pond = Otawask wicihtaw tawanipeyanik / Carriere, Ken.

Saskatoon, SK: Gabriel Dumont Institute, 2002.

Subjects: Wetland ecology – Juvenile literature. Cree Indians – Juvenile literature.

Summary: Written in Swampy Cree and English, this book provides students with an appreciation of the diversity and fragility of the prairie wetland ecosystem. The author describes the bulrushes through the seasons and how the various animals, insects, and birds rely on the bulrushes and ponds for survival. The book demonstrates that traditional First Nations knowledge is parallel to western science.

363.7 S335

Children of the earth ... remember / Schimmel, Schim.

Minnetonka, MN: North Word Books, 1997.

Subjects: Earth – Juvenile literature. Environmental protection – Juvenile literature. Animals – Juvenile literature.

Summary: Out of love and concern for their planet, the animals and people of Mother Earth work together to protect the natural world.



372.35 B655

Creating a classroom community of young scientists (2nd ed.) / Bloom, Jeffrey W.

New York, NY: Routledge, 2006.

Subjects: Science – Study and teaching (Elementary).

Summary: The author approaches science education through an inquiry-based and activities-based method. Students are responsible for (and in control of) their own and others' learning. Features in the book include examples of classroom practice, questions for reflection, planning and implementing instruction, and suggestions on how to include technology in the science classroom.

811.54 A362

The eco-diary of Kiran Singer / Alderson, Sue Ann.

Vancouver, BC: Tradewind Books, 2007.

Subjects: Bog ecology – Juvenile poetry. Wetland ecology – Juvenile poetry. Nature – Juvenile poetry.

Summary: Kiran explores the environmental problems threatening her local wetland. For her birthday, Kiran is given a diary by her Grandma. She is invited by her grandma to help her and a conservation crew to restore a bog in Vancouver, B.C. Using poetic form, Kiran expresses her thoughts about the bog and the various life species that live there. Through the text, students should be inspired to help protect wetlands in their local communities.



372.35 K98

Exploring safely: a guide for elementary teachers / Kwan, Terry. Texley, Juliana.

Arlington, VA: NSTA Press, 2005.

Subjects: Science – Study and teaching (Elementary) – Safety measures.

Summary: This resource relieves the many safety concerns that come with teaching elementary level science. The emphasis is on positive options for avoiding potential hazards. Chapters include making safe work habits second nature to students, equipping the classroom for safety, and choosing and culturing live plants and animals for classroom study.

577.24 G586

Fire!: The renewal of a forest / Godkin, Celia.

Markham, ON: Fitzhenry & Whiteside, 2006.

Subjects: Fire ecology – Juvenile literature. Forest fires – Juvenile literature. Forest ecology – Juvenile literature.

Summary: The forest has been dry and scorched for weeks. One afternoon, a hot wind blows and storm clouds gather. Lightning strikes a tree in the meadow and ignites the dry vegetation. No life remains in the burnt forest. As the years slowly pass, seeds start to germinate and small creatures inhabit the forest. Students will learn that fire is sometimes good for the regeneration of forests.

577.4 B615

Grasslands [DVD]

Wynnewood, PA: Schlessinger Media, 2003.

Subjects: Grasslands. Biotic communities. Savannas.

Summary: This program explores the characteristics of a grassland biome. It illustrates the effect of climate on soil type, vegetation, and wildlife. Abiotic and biotic factors are introduced, and a straightforward demonstration clarifies their relationship. The program addresses agricultural practices that support or destroy grassland habitats.

372.35 H236

Hands-on science 4 / Lawson, Jennifer E. Bowman, Joni. Cielen, Randy. Pattenden, Carol. Platt, Rita.

Winnipeg, MB: Portage & Main Press, 1999.

Subjects: Science – Study and teaching (Elementary).

Summary: Each unit is divided into lessons that include: materials lists, activity descriptions, questioning techniques, activity centre and extension ideas, assessment suggestions, and activity sheets and visuals. The four unit titles are Habitats and Communities, Light, Sound, and Rocks, Minerals, and Erosion.

639.9092 P984

He who flies by night: the story of Grey Owl / Punshon, Lori.

Regina, SK: Your Nickel's Worth Publishing, 2006.

Subjects: Grey Owl, 1888-1938 – Juvenile literature. Conservationists – Canada – Biography – Juvenile literature.

Summary: This is the true story of Archie Belaney, who fulfilled his childhood dream of living in Canada's north with First Nations people. Archie reinvents himself into Grey Owl and lives among the animals of the forest. Students will enjoy reading how Archie lives with his two beavers, Jelly Roll and Rawhide. Grey Owl's great legacy is his vision of conservation and the importance of our place in nature.

599.786 D256

Ice bear: in the steps of the polar bear / Davies, Nicola.

Cambridge, MA: Candlewick Press, 2005.

Subjects: Polar bear – Juvenile literature.

Summary: This book describes how the polar bear, also called Nanuk, thrives in the Arctic and explains the lessons that the Inuit people have learned from watching the creature.

590 R982

In my backyard / Ruurs, Margriet.

Toronto, ON: Tundra Books, 2007.

Subjects: Animals – Juvenile literature.

Summary: Children discover the animals that live in their backyards throughout the year. The wren is often the first sign that spring has arrived. Toads, snails, and snakes can be found in the backyard. Other animals featured in the book include a hummingbird, wasps and spiderlings, bats, and possums. The book includes a legend which contains brief information about each animal in the book.

507.1 H224

Integrating science with mathematics & literacy: new visions for learning and assessment (2nd ed.) / Hammerman, Elizabeth. Musial, Diann.

Thousand Oaks, CA: Corwin Press, 2008.

Subjects: Science – Study and teaching – Activity programs. Science – Ability testing. Mathematics – Study and teaching. Language arts.

Summary: The authors provide suggestions to integrate science with mathematics and literacy. They encourage teachers to develop reliable processes for assessing both their teaching practice and student

learning. Included in the book are over 20 performance assessments to promote student engagement. The assessments model inquiry-based science to allow learners to demonstrate their understanding of concepts through exploration, inquiry, and application.

The Land is Our Storybook Series

971.9300497 E61

The caribou feed our soul = ?etthen bet'a daghidda / Enzoe, Pete. Willett, Mindy.

Markham, ON: Fifth House, 2010.

Subjects: Lutsel K'e Dene First Nation – Biography – Juvenile literature. Caribou hunting – Northwest Territories – Juvenile literature. Chipewyan Indians – Hunting – Northwest Territories – Juvenile literature.

Summary: Pete takes readers on a respectful caribou harvest. Along the way, he shares creation stories about how his people are descendants of the caribou. He also describes the spiritual areas his community is trying to protect, including Thaidene Nene, which means "land of our ancestors." Pete's stories help the reader to understand the rich history of the Chipewyan Dene and their relationship with the caribou today.

971.9300497 Z85

Living stories = Godi weghàà ets'eèda / Zoe, Therese. Zoe, Philip. Willett, Mindy.

Markham, ON: Fifth House, 2009.

Subjects: Tlicho First Nation – History – Juvenile literature. Dogrib Indians – Juvenile literature. Summary: Join Tlicho youth as they learn about making dry-fish, bows & arrows, and birchbark baskets; the practices of medicine people; as well as the living stories that tell the history and laws of their people.

971.9300497 A555

We feel good out here = Zhik gwaa'an, nakhwatthaiitat gwiinzii / André, Julie-Ann. Willett, Mindy.

Markham, ON: Fifth House, 2008.

Subjects: Gwich'in Indians – Northwest Territories – Juvenile literature. Traditional ecological knowledge – Northwest Territories – Juvenile literature.

Summary: This is the story of Julie-Ann André. She is a Canadian Ranger, a mother, a hunter, a trapper, a business owner, and a student. In this book, she shares her family's story and the story of her land - Khaii Luk, the place of winter wish.

578.737 G944

Life in the boreal forest / Guiberson, Brenda Z.

New York, NY: Henry Holt, 2009.

Subjects: Taiga ecology – Juvenile literature.

Summary: The boreal forest is buried in ice and snow during winter. But in summer lakes teem with fish, and bogs swarm with insects. Follow a snowshoe hare, beavers, a lynx, and other animals as they survive a year in this endangered landscape.

372.35 R652

Light: stop faking it!: finally understanding science so you can teach it / Robertson, William C. Arlington, VA: NSTA Press, 2003.

Subjects: Light – Study and teaching. Optics – Study and teaching.

Summary: This resource helps teachers deepen their understanding of science concepts related to optics. The book explores ray, wave, and particle models of light, reflection and refraction, optical instruments, polarization of light, and interference and diffraction.



372.35 M685

Mixing it up: integrated, interdisciplinary, intriguing science in the elementary classroom Arlington, VA: NSTA Press, 2003.

Subjects: Science – Study and teaching (Elementary). Interdisciplinary approach in education. Summary: This resource provides over 25 suggestions to assist educators in combining concepts and processes within the sciences or among the disciplines. The book is divided into two sections: helping students build connections and school and community connections.



372.35 P361

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Summary: Each unit starts with a list of "Big Ideas" that set the focus for the unit. A Big Idea then provides the title for each section in the unit. Throughout the unit, opportunities are provided for students to work together, communicate ideas, perform experiments, and carry out library and Internet research.



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591.75 B328

Polar worlds / Bateman, Robert. Kovacs, Nancy.

Toronto, ON: Scholastic, 2008.

Subjects: Animals – Polar regions – Juvenile literature. Animals – Polar regions – Pictorial works – Juvenile literature. Polar regions – Description and travel – Juvenile literature.

Summary: Bateman introduces students to the world's polar regions. Divided into sections, he offers a short introduction to the topic. Wildlife species are presented over a two-page spread. One page is a painting of the species, and the opposite page contains a fact box and information about the species. Bateman also discusses survival in the habitat and migration.

371.102 P887



 $\textbf{Powerful learning: what we know about teaching for understanding} \ / \ Darling-Hammond, \ Linda.$

San Francisco, CA: Jossey-Bass, 2008. Subjects: Learning. Effective teaching.

Summary: The authors provide a number of teaching practices including project-based learning, cooperative learning, performance-based assessment, as well as instructional strategies in literacy, mathematics, and science.

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372.35 R287

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372.35 R652

Sound: stop faking it! / Robertson, William C.

Arlington, VA: NSTA Press, 2003.

Subjects: Sound.

Summary: This book is designed to help educators develop a deep understanding of the basics of sound, such as what causes sound, what sound waves are, and how to describe sound waves. The book addresses how sound moves and how different substances affect the movement of sound. Specific topics include the Doppler effect, harmonic convergence, how the ear works, and types of listening devices.

507.1 S837

Stepping up to science and math: exploring the natural connections / Goldston, M. Jenice (Ed.). Arlington, VA: NSTA, 2004.

Subjects: Science – Study and teaching. Mathematics – Study and teaching.

Summary: This resource aims to assist teachers to rethink and reflect on how they teach mathematics and science. The book is organized around three content areas: making connections among basic concept skills that underpin both science and mathematics, using scientific concepts as the core for investigations to link to other subject areas, and finding contemporary applications for scientific inquiry and experimentation.

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Uncovering Student Ideas in Science Series



507.1 K26

 $\label{lem:covering} \textbf{Uncovering student ideas in science: 25 formative assessment probes: volume 1 / Keeley, Page. } \\$

Eberle, Francis. Farrin, Lynn.

Arlington, VA: NSTA, 2005.

Subjects: Science – Study and teaching. Educational evaluation.

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Summary: Topics include forms of matter, changes in matter, living things and life processes, rocks and landforms, the day/night cycle, and objects in the night sky.



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Arlington, VA: NSTA, 2009.

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Summary: This book adds to the probes in physical, life, and earth and space science with a new category called "unifying principles". Also covered is a discussion on balancing formative assessment with summative assessment.

333.95 B328

Vanishing habitats / Bateman, Robert. Kovacs, Nancy.

Toronto, ON: Scholastic, 2009.

Subjects: Endangered species in art – Juvenile literature. Animals in art – Juvenile literature. Wildlife conservation – Juvenile literature. Habitat conservation – Juvenile literature.

Summary: Habitats around the world are under threat. A habitat can be large (e.g., a forest) or small (e.g., a dog's fur). Bateman briefly introduces the habitat and some of the species that are under threat in the environment. Some of the habitats that students will learn about include shorelines, oceans, wetlands, and old growth forests.

SCIENCE GRADE 5



Indicates item is a Ministry of Education's Core Learning Resource.

372.35 R652

Air, water, and weather: stop faking it! / Robertson, William C.

Arlington, VA: NSTA Press, 2005.

Subjects: Weather. Air.

Summary: This book is designed to help you develop a deep understanding of the basics so you can teach without fear. The author starts with the basic properties of air and water, then helps you learn about pressure, the Coriolis force, the Bernoulli Effect, density, and provides explanations of why hot air doesn't rise all by itself and why heating air doesn't necessarily cause it to expand. These concepts form a foundation for explanations of weather patterns, including the jet stream, storm fronts, and the formation of tornadoes and hurricanes.

398.2 C338

The barefoot book of earth tales / Casey, Dawn.

Cambridge, MA: Barefoot Books, 2009.

Subjects: Tales. Ecology – Folklore.

Summary: In this collection of seven folktales, readers will discover how various cultures celebrate our connection with nature and will be reminded how important it is to take care of Mother Earth. The narratives will increase understanding of our relationship with the land, celebrate the beauty of the natural world, and share wisdom to take care of the Earth. Includes an "eco-activity" for each tale.



500.8997 A291

Bridging cultures : scientific and Indigenous ways of knowing nature / Aikenhead, Glen. Michell, Herman.

Toronto, ON: Pearson, 2011.

Subjects: Science – Study and teaching. Ethnoscience. Native peoples – Canada – Education. Indian philosophy.

Summary: The recognition of Indigenous knowledge as an important, legitimate source of understanding of the physical world is increasing within education jurisdictions worldwide. This book provides science educators with knowledgeable perspectives on scientific and Indigenous content.

609.51 Y37

The Chinese thought of it: amazing inventions and innovations / Ye, Ting-xing.

Toronto, ON: Annick Press, 2009.

Subjects: Inventions – China – History – Juvenile literature. Technology – China – History – Juvenile literature. China – Antiquities – Juvenile literature.

Summary: The Chinese people used the resources around them to improve their lives. Travel and trade were facilitated with the development of the paddleboat. The dragon-spine water lift allowed the Chinese to move water from the river to a field or reservoir. The Chinese were among the first to invent processes for working with metal. Health and healing practices, such as inoculations, are believed to be used as early as the 10th century CE.

372.35 B655

Creating a classroom community of young scientists (2nd ed.) / Bloom, Jeffrey W.

New York, NY: Routledge, 2006.

Subjects: Science – Study and teaching (Elementary).

Summary: The author approaches science education through an inquiry-based and activities-based method. Students are responsible for (and in control of) their own and others' learning. Features in the book include examples of classroom practice, questions for reflection, planning and implementing instruction, and suggestions on how to include technology in the science classroom.



372.35 K98

Exploring safely: a guide for elementary teachers / Kwan, Terry. Texley, Juliana.

Arlington, VA: NSTA Press, 2005.

Subjects: Science – Study and teaching (Elementary) – Safety measures.

Summary: This resource relieves the many safety concerns that come with teaching elementary level science. The emphasis is on positive options for avoiding potential hazards. Chapters include making safe work habits second nature to students, equipping the classroom for safety, and choosing and culturing live plants and animals for classroom study.

372.35 R652

Force and motion: stop faking it! / Robertson, William C.

Arlington, VA: NSTA Press, 2002. Subjects: Motion. Force and energy.

Summary: This book describes how Isaac Newton viewed the relationship between forces and between forces and changes in motion. Other concepts that are examined include the force of gravity and circular motion. Most of the ideas presented in the resource are pulled together by describing how to get a rocket ship to the moon.

372.35 H236

Hands-on science 5 / Lawson, Jennifer E. Bowman, Joni. Chambers, Kevin. Cielen, Randy.

Josephson, Nancy. Kamal, Anita.

Winnipeg, MB: Portage & Main Press, 2000.

Subjects: Science – Study and teaching (Elementary).

Summary: The series consists of a teacher resource with four modules. The four unit titles are Maintaining a Healthy Body, Properties and Changes in Substances, Forces and Simple Machines, and Weather.

507.1 H224

Integrating science with mathematics & literacy: new visions for learning and assessment (2nd ed.) / Hammerman, Elizabeth. Musial, Diann.

Thousand Oaks, CA: Corwin Press, 2008.

Subjects: Science – Study and teaching – Activity programs. Science – Ability testing. Mathematics – Study and teaching. Language arts.

Summary: The authors provide suggestions to integrate science with mathematics and literacy. They encourage teachers to develop reliable processes for assessing both their teaching practice and student learning. Included in the book are over 20 performance assessments to promote student engagement. The assessments model inquiry-based science to allow learners to demonstrate their understanding of concepts through exploration, inquiry, and application.

971.004976 I64

The Inuit thought of it : amazing Arctic innovations / Ipellie, Alootook. MacDonald, David. Toronto, ON: Annick Press, 2007.

Subjects: Inuitt – Material culture – Juvenile literature. Inuit – Intellectual life – Juvenile literature. Inventions – Arctic regions – Juvenile literature.

Summary: The Inuit survived harsh living conditions for hundreds of years without modern conveniences. The authors highlight some of the technologies that the Inuit used to survive in the

north. Some of these technologies are used today with a modern twist, such as the kayak and snow goggles.

530 G458

Materials: liquids, solids, and gases: their properties and uses / Gifford, Clive.

Boston, MA: Kingfisher, 2005.

Subjects: Matter – Juvenile literature. Materials – Juvenile literature.

Summary: Students will learn why some materials sink or float, other materials can be bent or stretched, and some materials can be used as building blocks. At the end of the book are activities for students to try using various materials that can be found at school or in the home.



372.35 M685

Mixing it up: integrated, interdisciplinary, intriguing science in the elementary classroom Arlington, VA: NSTA Press, 2003.

Subjects: Science – Study and teaching (Elementary). Interdisciplinary approach in education. Summary: This resource provides over 25 suggestions to assist educators in combining concepts and processes within the sciences or among the disciplines. The book is divided into two sections: helping students build connections and school and community connections.

609.7 L259

A Native American thought of it: amazing inventions and innovations / Landon, Rocky.

Toronto, ON: Annick Press, 2008.

Subjects: Indians of North America – Science. Indians of North America – Material culture.

Inventions – North America.

Summary: First Nations people relied on their ingenuity to use the available resources around them. This resulted in many developments that made life easier for the communities. For example, the Iroquois were skilled at growing and harvesting food; the Sioux and Comanche developed camouflage and decoys to make catching animals easier. American and Canadian First Nations contributions are discussed in this book.

612 W183

Ouch!: how your body makes it through a very bad day / Walker, Richard.

New York, NY: DK Publishing, 2009.

Subjects: Human body – Juvenile literature. Human physiology – Juvenile literature.

Summary: Using one day as a timeline, students are taken on a journey of what a human body may go through, such as pus-filled pimples to pathogens and parasites. Using a nanocam, students will be able to view close-up how the body deals with problems and emergencies.



372.35 P361

Pearson Saskatchewan science 5 / Ellis, Laurie.

Toronto, ON: Pearson Education, 2012.

Subjects: Science – Textbooks.

Summary: Each unit starts with a list of "Big Ideas" that set the focus for the unit. A Big Idea then provides the title for each section in the unit. Throughout the unit, opportunities are provided for students to work together, communicate ideas, perform experiments, and carry out library and Internet research. First Nations and Métis content, perspectives, and ways of knowing are an integral part of the Saskatchewan science text.



372.35 A617

Picture-perfect science lessons: using children's books to guide inquiry, 3-6 (2^{nd} ed.) / Ansberry, Karen Rohrich. Morgan, Emily.

Arlington, VA: NSTA Press, 2010.

Subjects: Science – Study and teaching (Elementary). Picture books for children.

Summary: The authors provide 15 science lessons to teach inquiry-based science using literary texts. Each lesson contains engagement activities, hands-on explorations, student pages, suggestions for student and teacher explanations, opportunities for enrichment, assessment strategies, and annotated bibliographies of suggested resources. The lessons cover life science, physical science, and earth science.



371.102 P887

Powerful learning: what we know about teaching for understanding / Darling-Hammond, Linda. San Francisco, CA: Jossey-Bass, 2008.

Subjects: Learning. Effective teaching.

Summary: The authors provide a number of teaching practices including project-based learning, cooperative learning, performance-based assessment, as well as instructional strategies in literacy, mathematics, and science.

372.35 R287

Readings in science methods, K-8 / Brunsell, Eric (Ed.).

Arlington, VA: NSTA Press, 2008.

Subjects: Science – Study and teaching (Elementary). Science – Study and teaching (Middle school). Summary: This collection of NSTA journal articles allows practising teachers to reflect upon what is already known in their science teaching. The contributors provide suggestions for new approaches to teach classroom science.

507.1 S128

Safety in the science classroom: kindergarten to grade 12

Edmonton, AB: Alberta Education, 2006.

Subjects: Science – Study and teaching – Safety measures. Safety education. Safety measures. Science rooms and equipment – Safety measures.

Summary: This is a comprehensive manual regarding science safety. While Part A focuses on general safety management, Part B contains specific information around safety, storage, and management of chemical, biological, and physical hazards in the classroom relevant to science teachers at all grade levels. Appendices include examples of science safety rules and procedures, sample student safety contracts, and a chemical laboratory safety inspection checklist.

507.1 S837

Stepping up to science and math: exploring the natural connections / Goldston, M. Jenice (Ed.). Arlington, VA: NSTA, 2004.

Subjects: Science – Study and teaching. Mathematics – Study and teaching.

Summary: This resource aims to assist teachers to rethink and reflect on how they teach mathematics and science. The book is organized around three content areas: making connections among basic concept skills that underpin both science and mathematics, using scientific concepts as the core for investigations to link to other subject areas, and finding contemporary applications for scientific inquiry and experimentation.

372.357 S997

Take an ecowalk 1 : to explore science concepts : grades 1-5 / Szeto, Sandy.

Toronto, ON: Trifolium Books, 2002.

Subjects: Natural history – Study and teaching (Elementary). Science – Study and teaching (Elementary).

Summary: This resource offers background information for elementary level teachers, plus suggestions for pre- and post-walk classroom activities. It also provides samples of assessment tools such as rubrics.

670 S631

Transformed: how everyday things are made / Slavin, Bill. Slavin, Jim.

Toronto, ON: Kids Can Press, 2005.

Subjects: Manufactures – Juvenile literature.

Summary: Slavin shows the process of how objects are changed from raw materials to the finished products. He uses common items that students are familiar with, such as baseballs. Each two-page spread describes how the object is made by breaking the process down into steps.

Uncovering Student Ideas in Science Series



507.1 K26

Uncovering student ideas in science: 25 formative assessment probes: volume 1 / Keeley, Page.

Eberle, Francis. Farrin, Lynn. Arlington, VA: NSTA, 2005.

Subjects: Science – Study and teaching. Educational evaluation.

Summary: This book is comprised of 25 probes - brief, easily administered activities designed to determine your students' thinking on 44 core science topics (grouped by light, sound, matter, gravity, heat and temperature, life science, and Earth and space science). The probes are formative assessment tools to use before you begin teaching a topic or unit. The detailed teacher materials that accompany each probe review science content; give connections to National Science Education Standards and Benchmarks; present developmental considerations; summarize relevant research on learning; and suggest instructional approaches for elementary, middle, and high school students.



507.1 K26

Uncovering student ideas in science: 25 more formative assessment probes: volume 2 / Keeley, Page. Eberle, Francis. Tugel, Joyce.

Arlington, VA: NSTA, 2007.

Subjects: Science – Study and teaching. Educational evaluation.

Summary: Topics include forms of matter, changes in matter, living things and life processes, rocks and landforms, the day/night cycle, and objects in the night sky.



507.1 K26

Uncovering student ideas in science: another 25 formative assessment probes: volume 3 / Keeley, Page. Eberle, Francis. Dorsey, Chad.

Arlington, VA: NSTA, 2008.

Subjects: Science – Study and teaching. Educational evaluation.

Summary: This book offers five life science probes, seven earth and space science probes, ten physical science probes, and three nature-of-science probes.



507.1 K26

Uncovering student ideas in science: 25 new formative assessment probes: volume 4 / Keeley, Page. Tugel, Joyce.

Arlington, VA: NSTA, 2009.

Subjects: Science – Study and teaching. Educational evaluation.

Summary: This book adds to the probes in physical, life, and earth and space science with a new category called "unifying principles". Also covered is a discussion on balancing formative assessment with summative assessment.

551.6 H313

Weather: discover why It storms, rains, snows, or shines / Harris, Caroline.

New York, NY: Kingfisher, 2009.

Subjects: Weather – Juvenile literature.

Summary: Water, air, and heat from the sun work together to make weather. Students will learn about

the seasons, climate, extreme weather, and the future of weather.



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