

SCIENCE-IN-A-CRATE

Each crate:

- Easy to use
- Meets specific curricular outcomes
- Has a number of activities so every student can be actively involved in learning
- Sets a creative stage through stories, mysteries and challenges
- Engages learners in scientific inquiry and problem solving with its hands-on, minds-on activities
- Contains accurate science content vetted by science experts
- Developed in collaboration with teachers and students to model best practices for science instruction

Book your crates at
bookings.sciencealberta.org

SCIENCE-IN-A-CRATE

The crate delivers a wealth of curriculum-related resources right to your classroom. Each crate has hands-on activities that inspire students. The activities model inquiry-based learning, meet multiple learning styles and foster focused, independent discovery. Plus, unique tools, customized models and difficult to access equipment are included to further support science learning. Furthermore, the stories, mysteries and challenges intrigue students. Students want to complete all the activities – they are excited about learning!

Order online at bookings.sciencealberta.org:

- Set up a personal account
- Reserve using PayPal™
- Access activity guides before your crate arrives
- Let us suggest other related resources



STUDENTS HELP TEST CRATES

KINDERGARTEN

Learning about my Environment and Community; Use of Materials; and Familiar Places in my Environment and Community
ABORIGINAL WAYS OF KNOWING: SHARING OUR ENVIRONMENT

(Award winning Aboriginal Ways of Knowing program)
 Young children are natural scientists and this crate nurtures that ability by fostering curiosity and encouraging them to explore, investigate and question the world around them. Through traditional ways of knowing, participants discover different ways natural and human-made things in their environment interact, explore how they are part of the environment and question their role within the environment.

Made possible through funding from Nexen Inc. and The Association of Professional Engineers, Geologists and Geophysicists of Alberta (APEGGA).

You may also enjoy 'Fishing with Haley' found on Wonderville.ca

GRADE 1

Needs of Plants and Animals
GRASSLAND GATHERINGS

Become a junior wildlife biologist and explore the needs of plants and animals in the grassland regions of southern Alberta. Observe and classify some of the different species that make their home in this area and check out their habitats. Learn how they must adapt to the conditions around them in order to survive and identify their interdependency upon one another. Find out ways in which they are valued as living things and recognize how we must provide for those plants and animals in our care.

Made possible through funding from Operation Grassland Community.

You may also enjoy 'Photosynthesis' found on Wonderville.ca

GRADE 2

Magnetism

PIRATES OF THE LODESTONE

Arr, matey! This pirate-themed crate has participants navigating a treasure map with a compass, creating floating rafts and trying to trap the pirate Captain Repel as they learn about magnetism.

Made possible through funding from Imperial Oil Foundation.

You may also enjoy 'Forces of Wonder' found on Wonderville.ca

GRADE 3

Building with a Variety of Materials, Testing Materials and Designs

ABORIGINAL WAYS OF KNOWING: STORIES OF THE IINII

(Award winning Aboriginal Ways of Knowing program)
 Gather around Hayley Little Moccasin's Great Grandmother as she tells the stories of the great Iinii or buffalo. Understand and respect practical Aboriginal ways of knowing and link this knowledge with the science of testing materials and designs using a variety of building materials.

Made possible through funding from Nexen Inc.

You may enjoy 'Build a Tipi' found on Wonderville.ca

F.A.R.M.S: FARM ANIMAL RELATIONSHIP MONITORING SYSTEM

Jo's farm is a fictional Alberta farm that comes alive in the classroom. This crate immerses students into farm life where they help Jo observe common and not-so-common animals found on her farm. Participants discover and deepen their understanding about animals, animal adaptation to different environments, life cycles and requirements for their care by seeing it through a relevant and relatable story line.

Made possible through funding from Imperial Oil Foundation and Agriculture Financial Services Corporation (AFSC).

You may also enjoy the 'Wetlands Activity' found on Wonderville.ca

GRADE 4

Light and Shadows

LEONARDO'S ENGINEERING ACADEMY OF LIGHT AND SHADOWS

Leonardo da Vinci was an architect, scientist and engineer who combined scientific intellect with artistic creativity to produce hundreds of designs. As optical engineers training at Leonardo's Engineering Academy of Light and Shadows, you will learn the basic concepts of light and shadows and test Leonardo's theories.

Made possible through funding from ConocoPhillips Canada and The Association of Professional Engineers, Geologists and Geophysicists of Alberta (APEGGA).

You may also enjoy 'Amazing Liquid Light' found on Wonderville.ca

GRADE 5

Classroom Chemistry

WHOOOPS: UNEXPECTED DISCOVERIES IN CHEMICAL ENGINEERING

This crate uses popular items (like popsicles and Silly Putty®) to explain the chemistry behind their accidental discovery. Students are encouraged to inquire and problem solve while developing their skill and confidence in investigating. By completing the activities introduced by chemical engineers and their accidental discoveries, participants learn about chemical properties, reaction, interactions and the diverse world of chemical engineering.

Made possible through funding from ConocoPhillips Canada and The Association of Professional Engineers, Geologists and Geophysicists of Alberta (APEGGA).

You may also enjoy 'Reaction Action' found on Wonderville.ca

GRADE 6

Evidence and Investigation

THE GRIFFIN INQUEST

A pipeline explosion. A late night phone call. A threatening letter. Six suspects. Use forensic techniques in the areas of fingerprints, fiber analysis, footwear impressions, tire impressions, soil analysis and questioned documents to help Sergeant Richardson and her forensic team discover the true identity of the perpetrator in The Griffin Inquest. Three levels allow you to differentiate instruction.

Made possible through funding from The Brawn Foundation.

You may also enjoy the 'Fingerprint Activity' found on Wonderville.ca