Big Idea *Earth materials change as they move through the rock cycle and can be used as natural resources.*

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| **Science 5 - Earth Materials DLRC Resources February 2019** | |
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| 333.7 CAN | Canadian resources [kit]. [Burnaby, B.C.: assembled by Burnaby School District], 2013. This kit contains the following titles: Forests by the numbers / Jason McClure -- Oil by the numbers / Jason McClure -- Water by the numbers / Jason McClure -- Gold by the numbers / Jason McClure -- Diamonds by the numbers / Jason McClure -- Natural gas by the numbers / Jason McClure. Grades: 5 6 7. A collection of titles on Canadian natural resources, such as forests, oil, water, gold, diamonds and natural gas. "The series pairs engaging graphics and images with educational text to give readers an understanding of Canada's natural resources. Readers will learn about the natural resources, where they are found in Canada, how they are used, and the technologies that have developed because of them. Each book also includes an activity and quiz, as well as link to further resources." -- Cover p.[4]. |
| 500 NLS GR5 | Nelson science 5 [kit]: physics and Earth/space. (Series: Nelson science) [Burnaby, B.C.]: assembled by Burnaby School District, 2018.  Contains: 14 identical student books (110 pages: colour illustrations; 28 cm.), 2 teacher's guides (1 copy each of 2 titles). Grades: 5. "The Nelson science series is one of a suite of Nelson resources designed for the BC curriculum. Nelson science fully meets the goals and rationale of the curriculum and addresses all the learning standards and big ideas." Earth materials: "In this unit, students inquire into Earth materials. They will use the skills, processes, and habits of mind of scientific inquiry to explore the rock cycle and Earth materials in the local area, and recognize the importance of sustainability."--Page 90 of student book. |
| 549 MIN | Minerals [kit]. [Burnaby, B.C.: assembled by Burnaby School District], 2005. Teacher's guide: A descriptive list of the 36 minerals in each kit. Grades: 4 5 6 7 8 9 10 11 12. This kit contains samples of different minerals. |
| 550 CHA | The changing Earth [kit]. [Burnaby, B.C.: assembled by Burnaby School District], 2011. This kit contains the following titles: Icebergs, ice caps, and glaciers / by Allan Fowler -- They could still be mountains / by Allan Fowler -- Geysers / by Larry Dane Brimner -- Earth in danger / Steve Pollock -- The magic school bus inside the Earth / Joanna Cole -- Are mountains growing taller? : questions and answers about the changing Earth / Melvin and Gilda Berger -- 100 facts: planet Earth / Miles Kelly. Grades: 5 6 7. This kit provides information on the Earth, and how the surface of the Earth changes. |
| 552 COO | Cool rocks and gems [kit]. [Burnaby, B.C.] : assembled by Burnaby School District, 2016. Kit contains the following titles: Canada's rocks and minerals / Joanne Richter -- Rocks & minerals / Nancy Honovich -- Volcanic rocks / Heather Dakota -- Rocks, minerals, and gems / Jordan D. Brown. Pamphlet: A field guide to the identification of pebbles / Eileen Van der Flier-Keller. Rock collections: Volcanic rocks (9 rock samples and 1 book in package) -- Deluxe rocks and gems collection (12 rock samples, 1 magnifying glass, 1 book in package). Grades: 5. This kit contains books for identifying and collecting a variety of rocks and minerals, as well as two separate collections of samples that may be investigated by students up close. |
| 552 IFY | If you find a rock [kit]. [Burnaby, B.C.: assembled by Burnaby School District], 2014. This kit contains the following titles: The pebble in my pocket: a history of our Earth / Meredith Hooper -- If you find a rock / Peggy Christian -- Rocks: hard, soft, smooth, and rough / Natalie M. Rosinsky. Includes a portion of the teacher's guide More picture-perfect science lessons: using children's books to guide inquiry, K-4 / Karen Ansberry, Emily Morgan. Grades: 2 3 4. Picture-perfect science integrates reading comprehension and content knowledge in different areas of science. This program uses picture books and activities to reinforce the concepts of inquiry-based learning for students and teachers. In this unit, "Learners observe, describe, and sort a variety of rocks, discovering that rocks have certain physical properties by which they can be classified." --Page 157 of teacher's guide. |
| 552 ROC KIT1 | Rocks and minerals. Kit 1 [kit]. [Burnaby, B.C.] : assembled by Burnaby School District, 2012. Kit contains the following titles: Is there a dinosaur in your backyard? : the world's most fascinating fossils, rocks, and minerals / Spencer Christian, Antonia Felix -- Janice VanCleave's rocks and minerals : mind-boggling experiments you can turn into science fair projects / Janice VanCleave -- Rocks and minerals / Neil Morris -- Rocks and minerals : [open your eyes to a world of discovery] / Caroline Bingham -- Everything rocks & minerals / Steve Tomecek -- Find out about rocks / Terry Jennings -- Rocks and the people who love them / Nel Yomtov -- Everybody needs a rock / Byrd Baylor -- Rocks & minerals / R.F. Symes -- What are sedimentary rocks? / Natalie Hyde -- What are metamorphic rocks? / Molly Aloian -- What are igneous rocks? / Molly Aloian -- What is the rock cycle? / Natalie Hyde -- What are fossils? / Natalie Hyde -- What are crystals? / Molly Aloian -- What are minerals? / Natalie Hyde -- Stone wall secrets / Kristine and Robert Thorson -- Stone wall secrets, exploring geology in the classroom: teacher's guide / Ruth Deike -- Rock & fossil hunter / Ben Morgan -- Rocks, crystals, and gems -- The rock cycle / Cheryl Jakab. Grades: 4 5 6. Explains the origin of various types of rocks and minerals, how they are classified, where they can be found and how they are used. Includes experiments and activities, a work of fiction and a graphic novel. This kit also includes books from Crabtree Publishing's Let's rock series. |
| 552 ROC KIT2 | Rocks and minerals. Kit 2 [kit]. [Burnaby, B.C.: assembled by Burnaby School District], 2012. This kit contains the following titles: Rocks and minerals, teacher's guide -- Rocks and minerals : earth and space systems / Steve Campbell [et al.] -- Eyewitness rocks & minerals / R.F. Symes -- Dirtmeister's nitty gritty planet Earth / Steve Tomecek -- Geology rocks : 50 hands-on activities to explore the earth / Cindy Blobaum -- What is rock? / Fred & Jeanne Biddulph -- A look at rocks: from coal to kimberlite / Jo S. Kittinger -- I am a rock / Jean Marzollo -- Crystal & gem / R.F. Symes, R.R. Harding -- Crystals and crystal gardens you can grow / Jean Stangl -- What are sedimentary rocks? / Natalie Hyde -- What are metamorphic rocks? / Molly Aloian -- What are igneous rocks? / Molly Aloian -- What is the rock cycle? / Natalie Hyde -- What are fossils? / Natalie Hyde -- What are crystals? / Molly Aloian -- What are minerals? / Natalie Hyde -- Can you find these rocks? / Carmen Bredeson and Lindsey Cousins -- Rocks and minerals / Dan Green -- Rocks and minerals: a gem of a book / Basher. Poster: DK Eyewitness wall charts: rocks and minerals. Grades: 4 5 6. Explains the origin of various types of rocks and minerals, how they are classified, where they can be found and how they are used. Includes geological experiments such as growing crystals as well as a poster, clip-art CD-ROM and teacher's guide. This kit also includes books from Crabtree Publishing's Let's rock series. |
| 552.1 IGN KIT1 | Igneous rocks. Kit 1 [kit]. [Burnaby, B.C.: assembled by Burnaby School District], 2001. Grades: 4 5 6 7 8 9 10 11 12. This kit contains samples of different igneous rocks. |
| 552.1 IGN KIT2 | Igneous rocks Kit 2 [kit]. [Burnaby, B.C.: assembled by Burnaby School District], 2001. Grades: 4 5 6 7 8 9 10 11 12. This kit contains samples of different igneous rocks. |
| 552.4 MET | Metamorphic rocks [kit]. [Burnaby, B.C.: assembled by Burnaby School District], 2001. Grades: 4 5 6 7 8 9 10 11 12. This kit contains samples of different metamorphic rocks. |
| 552.5 SED KIT1 | Sedimentary rocks. Kit 1 [kit]. [Burnaby, B.C.: assembled by Burnaby School District], 2001. Grades: 4 5 6 7 8 9 10 11 12. This kit contains samples of different sedimentary rocks. |
| 552.5 SED KIT2 | Sedimentary rocks Kit 2 [kit]. [Burnaby, B.C.: assembled by Burnaby School District], 2001. Grades: 4 5 6 7 8 9 10 11 12. This kit contains samples of different sedimentary rocks. |
| 971.1 BRI | British Columbia [kit]: its land, mineral and water resources. [Burnaby, B.C.: assembled by Burnaby School District], 2012. This kit contains the following titles: British Columbia: its land, mineral and water resources / Sandy Frances Duncan; [illustrated by Glen Mullaly]. 4th ed. (15 copies) -- Teacher's guide: British Columbia: its land, mineral and water resources / written by Cathy Ready, edited by Diana Mumford. Grades: 5 6 7. Explores British Columbia's living and non-living resources; the tools and technology used in resource-based industries; and the problems resulting from resource use. This kit contains multiple copies of a single student's book with an accompanying teacher's guide. |
| DVD 333.79 FIR | Fire - energy [videorecording]. (Series: Transit across Canada) Montreal : National Film Board of Canada, 2000  Grades: 5. Secondary ELL. This film features Canada's rich energy resources--natural wealth that provides its people with a standard of living that is the envy of nations around the world. Wind, water, sun, oil, uranium and natural gas are transformed into fuel for cars, heat for homes and power for appliances. Canadians are beginning to realize that their quality of life also depends on the quality of the environment. The film is a good review of past, present, and potential future sources of energy. |
| DVD 549 MIN | Minerals [videorecording]. Brandon, VT: Visual Learning Company;, c2008. Grades: 4 5 6 7. |
| DVD 550 CLO | A closer look at Earth [videorecording]. 2007 ed. El Dorado Hills, Ca. 100% Educational Videos/SchoolVideos;, c2004. Narrators: Liz Jackson, JD Rudometkin. From above and below the surface, students take a closer look at what makes the third planet from the sun so special. They learn to read clues to earth's history in eras, plates, and core structures. They witness the forces that constantly change the surface features, like weathering, erosion and volcanic activity. They see what our planet is made of. Spectacular NASA footage and lively animation will peak students' curiosity -- Container. |
| DVD 551.1 WHA | What's the Earth made of? ; Every stone has a story [videorecording]. [Burnaby, B.C.] : compiled by Burnaby School District, 2018.  2 National Geographic programs on 1 DVD (48 min.)+ 1 teacher's guide. Grades: 4 5 6 7.  What's the Earth made of? "An introduction to the earth sciences, [this video] uses animation and live action to show students not only what the earth is made of, but how we know about it. Students learn the differences between sedimentary, igneous, and metamorphic rocks, the significance of seismic waves, and receive an introduction to plate tectonics."--Teacher's guide.  Every stone has a story: Scientist and rockhound, Rolf Johnson in America's West, seeks landforms that exhibit the three main classes of rocks: sedimentary, igneous and metamorphic. Viewers learn how to observe and test rock samples to determine the minerals and crystals they contain. |
| DVD 552 RCK | Rocks & soil [videorecording]. Classroom ed. Elk Grove Village, IL: Disney Educational Productions;, 2008. Host, Bill Nye. Grades: 4 5 6 7. Bill unearths the hard facts on volcanoes, landslides, tectonic plates, rivers, weather, and their varied effects on the creation of rocks and soil. Check out how to unearth fossils in sedimentary rocks and soil and discover why there's a piece of quartz in watches. |
| DVD 552 ROC | Rocks [videorecording]. Brandon, VT: Visual Learning Company;, c2008. Grades: 4 5 6 7. Define rock as a solid, naturally-occurring mixture of minerals. Define minerals as solids with a definite chemical composition and crystal structure. Describe geology as the study of Earth. Identify the three primary groups of rock: igneous, sedimentary, and metamorphic. Define fossils as the remains or traces of once-living things. |
| DVD 622.0971 MIN | Mining in Canada [videorecording]. Burnaby, BC: Classroom Video, 2006. How a mine works -- Mining and the environment: Acid rain -- Acid rock drainage -- Reclaiming the tailings -- Mining towns -- Val d'Or -- Timmins -- Houston -- Credits. This program looks at mining processes, both open pit and underground, the economy of four mining towns to see the cashflow generated by a mine, as well as the effect on jobs and services. Also looked at is the environmental impact such as acid rock drainage produced and treated at a shut down mine. Social aspects in a mining town, including recovery after a mine closure are discussed. |
| ELL 551 BRA | Brasch, Nicolas. Why do volcanoes erupt? [kit]: and other questions about rocks. [Burnaby, B.C.] : [Burnaby School District], 2012. Why do volcanoes erupt? : and other questions about rocks / Nicolas Brasch. Cambridge, UK: Cambridge University Press, c2010. Audience: Primary, Intermediate ELL. Level 2. What is a fossil? What are minerals and metals? What is the largest monolith in the world? You can find the answers to these and other questions about Earth in this book. --Cover p. [4]. |
| ELL 552 EXP | Exploring rocks and minerals [kit]. [Burnaby, B.C.: assembled by Burnaby School District], 2014. This kit contains the following title: Rocks and minerals / Judy Halpern. Kit includes a section of the Big idea science teacher's guide. Audience: Intermediate ELL. Level 2. "This series offers students opportunities to learn essential curriculum concepts, develop content-specific vocabulary and academic words in context, as well as acquire competencies in literacy and critical thinking skills." --Page 4 of teacher's guide. "This book explores rocks and minerals and how we use them in our lives every day." --Page 63 of teacher's guide. NOTE: Copy 2 of this kit has only 6 copies of student book. |
| PRI 552 COM | Common rocks and rock-forming minerals [study prints]. Chicago, Ill.: Society for Visual Education Inc., c1964. Sedimentary rocks -- Igneous rocks -- Metamorphic rocks -- Fossils -- Calcite minerals -- Feldspar minerals -- Silica minerals -- Mica & dark minerals. Contains picture on one side with brief description of the rock or mineral on the other. |
| SPF 550 PLA | Ressources naturelles [kit]: roches et minéraux. [Burnaby, B.C.] : assembled by Burnaby School District, 2018. Kit contains the following titles: Les combustibles fossiles / Carmel Reilly (6 copies) -- Roches et minéraux / Gary Cross [and 10 others] (15 copies) -- Les diamants canadiens / Anne Lavigne (6 copies) -- La découverte des métaux / Carmel Reilly (6 copies) -- Les roches et les minéraux / Dorothy Avery (2 copies) -- L'or noir / Avelyn Davidson (1 copy) -- Les pierres qui brûlent, qui brillent, qui bavardent / Martial Caroff (1 copy) -- Absolument tout sur les roches et minéraux / Steve Tomecek (1 copy). Teacher's guide: Roches et minéraux. Guide d'enseignement / Gary Cross [and 10 others]. Grades: 5 (French Immersion). This kit contains a selection of books about Earth, natural resources, rocks and minerals, for intermediate French Immersion. |
| SPF 550 TER | La Terre et l'espace [kit]. [Burnaby, B.C.: assembled by Burnaby School District], 2015. Kit contains the following titles: Les minéraux -- Les roches -- Les fossiles -- La lune -- La Terre -- La météo. Grades: 4 5 6 7 (French Immersion). "La collection Pour tout dire reconnaît que la communication orale, la lecture et l'écriture sont interdépendantes et que l'apprentissage de l'une contribue à l'acquisition de l'autre."--Page [2] of cover. The titles in this series are also appropriate for French LSS. |