Big Idea *Matter has mass, takes up space, and can change phase.*

|  |  |
| --- | --- |
| **Science 4 Matter DLRC Resources January 2019** | |
| 500 NEL GR4 | Nelson science 4 [kit]: biology and chemistry. [Burnaby, B.C.] : assembled by Burnaby School District, 2018. Kit includes 14 copies of the following title: Nelson science 4: biology and chemistry / Carolyn Durley, Doug Fraser. Teacher's guides: Nelson science 4 teacher's resource: biology and chemistry / Carolyn Durley, Doug Fraser -- Nelson science resource overview, 4-7 / Anita Chapman. Student book topics: Biology: senses and responses -- Chemistry: phases of matter. Grades: 4. "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."--Page [4] of Resource overview. Senses and responses: "Students will explore and investigate the use of sense organs to gather information and how this information in turn leads to responses. Every sense and response is an interaction between living things and their environment."--Page 10 of teacher's resource. Phases of matter: "In this unit, students will use the skills, processes, and habits of mind of scientific inquiry to explore phases of matter and the effect of temperature on particle movement."--Page 88 of student book. |
| 530 HOW | How matter changes [kit]: exploring the structure of matter. New York: Scholastic, c1995. This kit contains the following titles: How matter changes: exploring the structure of matter [a teacher's map] (1 copy) -- ScienceMats: how matter changes: exploring the structure of matter (1 copy) -- How matter changes: the k!zing! caper: video guide (1 copy) -- The world of the atom / Neil Ardley (1 copy) -- Marie Curie and radium / Steve Parker (1 copy) -- How matter changes: exploring the structure of matter [a student map] (8 copies). VHS: How matter changes: the k!zing! caper (ca. 14 min.). Grades: 4 5 6 7. The main concept addressed by this kit is the change in matter when energy is added to or taken away from it, or when different kinds of matter are brought together. Sub-concepts include: how matter is composed of very small particles; how in a physical change, a substance may change its state but not its nature; and how in a chemical change, a substance changes into a different substance. |
| 530.4 EVE | Everything is made of matter [kit]. [Burnaby, B.C.] : assembled by Burnaby School District, 2018. Kit contains the following 11 titles: How does it feel? / Kevin Biggs -- Water can change / Brian Birchall -- Make a monster / Sue Whiting -- States of matter / Mary Garcia -- Everything is made of matter / Rowan Sellers -- How does it change? / Christine Finochio, Jennette MacKenzie -- Kitchen science / Monica Halpern -- Solids, liquids, and gases at campsites / Fawn Bailey -- In the kitchen / Dorothy Heil -- Mixed-up matter -- Let's cook. Grades: K 1 2 3. The books in this kit introduce big ideas using simple text and evocative illustrations. Students will understand concepts including the various properties and forms of matter, and how substances interact in everyday life. |
| 530.4 MAT | Matter [kit]: make it change. [Burnaby, B.C.] : assembled by Burnaby School District, 2018. Kit contains the following 12 titles: Solids, liquids, and gases / Ginger Garrett -- Materials / Anna Claybourne -- Where did the water go? / Amy S. Hansen -- Materials and processes / Peter Riley -- Make it change / David Evans and Claudette Williams -- States of matter / Mary Garcia -- Matter: physical science for kids / Andi Diehn -- It's a gas! / Margaret Griffin and Ruth Griffin -- Solids, liquids and gases / Ontario Science Centre -- What makes it cold? / Garfield Reeves-Stevens and Judith Reeves-Stevens -- Recreate discoveries about states of matter / Anna Claybourne -- Liquid magic / Philip Watson. Grades: 4. The books in this kit explore the various states of matter, how they are related and how they change. |
| 530.4 PRO | Properties of matter [kit]. [Burnaby, B.C.] : assembled by Burnaby School District, 2012. Kit contains the following 10 titles: Solids, liquids and gases / Ontario Science Centre -- Solid, liquid, or gas? / Sally Hewitt -- Solids, liquids and gases / J. M. Patten -- Science & technology 5. Changes in matter / Steve Campbell et al. -- Liquid to gas and back / J. M. Patten -- What makes it cold? display, activity book / Judith & Garfield Reeves-Stevens -- What does it go in? display, activity book / Judith & Garfield Reeves-Stevens -- It's a gas! / Margaret Griffin and Ruth Griffin -- Conservation of mass / Jenna Winterberg -- Matter and its properties / Joseph Midthun, Samuel Hiti. Teacher's guide: Science & technology 5. Changes in matter teacher's guide / Carol-Ann Freeman. Grades: 4. This kit contains a collection of non-fiction books examining the properties of solids, liquids and gases. Includes a teacher's guide, student activities and science experiments. |
| 530.4 STA | States of matter [kit]. [Burnaby, B.C.: assembled by Burnaby School District], 2009. This kit contains 3 copies of the following 4 titles: Liquids -- Gases -- Solids -- How water changes. Grades: 2. A collection of the books on the different states of matter: liquids, solids, gases and how water changes. This kit supports the Grade 2 Physical Science strand: properties of matter. |
| 530.4 TEA | Teaching states of matter [kit]. [Burnaby, B.C.: assembled by Burnaby School District], 2009. This kit contains 4 copies of the following 3 titles: What is a liquid? -- What is a gas? -- What is a solid?. Teacher's guide: Teaching states of matter: first grade reading level: teaching guide. Grades: 2. Photographs and simple text describe the physical properties of liquids, gases and solids. This kit can be used to support the Grade 2 Physical Science strand: properties of matter. |
| DVD 530.4 MAT | La matière [videorecording] : les solides, les liquides et les gaz. Montréal, Que. : Cinéfête, 2011. Grades: 2 3 4 5 (French Immersion) and 6 (French Late Immersion). La matière est partout -- de l'univers tout entier à la plus petite particule de poussière, tout ce que nous entoure est constitué de matière. Les étoiles, les être vivants, les plantes, un jouet, tous sont composés de matière, même si celle-ci nous apparaît sous des formes différentes. --Container. |
| DVD 530.4 PHA | Phases of matter [videorecording]. Classroom ed. Elk Grove Village, IL: Disney Educational Productions;, 2008. Disc also features fully indexed 'chapters' correlated to National Science Standards, interactive glossaries and quizzes, bonus footage of never-before-seen segments, interviews, and demos, Spanish translation and closed-captioning, and implementation guide. Host: Bill Nye. Grades: 4 5 6 7. "Bill Nye takes viewers on a tour of a steel mill to help demonstrate that matter exists in three phases - solids, liquids and gases." --Container. |
| DVD 530.414 CHO | Les choses changent [videorecording] : solides, liquides et gaz. [Montréal] : Multimedia Audiovisuel, c1980. Grades: 1 2 3 (French immersion). Illustration de la transformation de l'eau sous les formes liquide, solide et gazeuse. Illustrates the transformation of matter according to variations in the environment and temperature. |
| DVD 530.414 HOW | How does matter change states? [videorecording]. Chicago, IL: Encyclopaedia Britannica Educational Corporation, c1990. Grades: 4 5 6 7. "What causes a liquid to solidify or a gas to condense? This program explores the ways in which matter can change from one state to another."--Container. |
| ELL 507.1 WIN FLU | Windows on literacy. Science. Fluent. Kit 4 [kit]. Washington, D.C.: National Geographic Society, c2006. This kit contains the following student books: Plant life theme books. Plant life / Juan Rueda -- My bean plant / Joseph Ciciano -- Wind, water, and sunlight theme books. Wind, water, and sunlight / Nisha Da Silva -- Wind power / Pat Malone -- Sun power / Louis Capra -- Prehistoric life theme books. Prehistoric life / Daniel Levine -- Exploring fossils / Nicolas Brasch -- Dinosaur extremes / Nicolas Brasch -- States of matter theme books. States of matter / Mary Garcia -- Everything is made of matter / Rowan Sellers -- Water can change / Brian Birchall -- Animal habitats theme books. Animal habitats / Michelle Kramer -- Life in the ocean / George Huxley -- The rain forest / Pat Malone. Teacher's resources: Teacher's guide: fluent -- Take-home book masters: fluent -- Learning masters: fluent. Media: Plant life : fluent : audiolesson disc 1 [electronic resource] -- Wind, water, and sunlight : fluent : audiolesson disc 5 [electronic resource] -- Prehistoric life : fluent : audiolesson disc 6 [electronic resource] -- States of matter : fluent : audiolesson disc 9 [electronic resource] -- Animal habitats : fluent : audiolesson disc 10 [electronic resource] -- Language, literacy & vocabulary presentation DVD [videorecording]. Audience: Fluent ELL. Level 1 2 3. Windows on Literacy offers an array of leveled nonfiction readers designed to engage and motivate students as they progress through the developmental stages of reading. Titles in each stage—from Step Up to Fluent Plus—are carefully crafted to provide the supports and challenges that young readers need to build a strong foundation for literacy success. |
| ELL 530 REE | Rees, Peter. Why does water freeze? [kit]: and other questions about matter. [Burnaby, B.C.] : [Burnaby School District], 2012. 5 copies of Why does water freeze? : and other questions about matter / Peter Rees. Cambridge, UK: Cambridge University Press, c2010. Audience: Upper Primary, Intermediate ELL. High level 1, level 2. What makes fire burn? Why is water wet? What is air made of? You can find the answers to these and other questions about matter in this book. --Cover p. [4]. |
| SPF 530.4 MAT | La matière [kit]. [Burnaby, B.C.] : assembled by Burnaby School District, 2017. Kit contains the following 4 titles: Matière à réflexion! / Yvonne Morrison (6 copies) -- Matière et matériaux / Peter Mellett (3 copies) -- Forces, matière et énergie / Leslie Garrett (2 copies) -- La matière / Anna Claybourne (1 copy). Grades: 4 5 (French Immersion). This kit contains a collection of French-language nonfiction books examining the properties of solids, liquids and gases, as well as mixtures and solutions. |
| V 530.4 CHA | Changes in properties of matter [videorecording]. Wynnewood, PA: Schlessinger Media, c2000. Grades: 5 6 7 8. Discover how and why matter changes form. Discover the role of energy and its effects on the movement of particles in a substance. |
| V 530.4 SOL | Solid, liquid, gas [videorecording]. 2nd ed. Northbrook, Ill: Coronet/MTI Film & Video;, 1990. Introduces the physics involved in the 3 common states of matter: solid, liquid, gas. |