Big Idea *Thermal energy can be produced and transferred.*

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| **Science 3 - Thermal Energy DLRC Resources October 2018** | |
| 523.7 SUN | Sunshine on my shoulders [kit]. [Burnaby, B.C.: assembled by Burnaby School District], 2014. This kit contains the following titles: The sun is my favorite star / Frank Asch -- Sun / Steve Tomecek -- John Denver's Sunshine on my shoulders / Christopher Canyon. 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: K 1 2. Picture-perfect science integrates reading comprehension and content knowledge in different areas of science. In this unit, "Learners conduct simple experiments to find out what makes 'mystery beads' change color outdoors. They discover that invisible rays of UV (ultraviolet) light cause the beads to change color." --Page 169 of teacher's guide. |
| 536 TEN | Thermal energy for grade 3 science [kit]. [Burnaby, B.C.] : assembled by Burnaby School District, 2018.  Kit contains: 9 digital thermometers, 1 set Incredible ice melting blocks, 2 wooden spoons, 2 metal spoons, 2 plastic spoons, 2 ceramic dishes (1 white and 1 black), 2 container lids (1 white and 1 black), 2 T-shirts (1 white and 1 black), 8 large containers with lids, 8 small containers with lids, 8 bags wool, 8 bags cattail fluff, 8 bags wood chips, 1 radiometer, 1 glass convection ring with clamp, 10 pairs of handwarmers, 1 teacher's guide (unpaged : illustrations ; 29 cm.) This kit includes materials that may be used to perform experiments with heat and energy transfer. |
| 536 THE | Thermal energy [kit]: introducing heat. [Burnaby, B.C.] : assembled by Burnaby School District, 2016. Kit contains the following titles: Investigating heat / Sally M. Walker (1 copy) -- Hot and cold / Terry Jennings (1 copy) -- The energy that warms us: a look at heat / Jennifer Boothroyd (1 copy) -- What makes fire burn? / Walter LaPlante (1 copy) -- How heat moves / Sharon Coan (1 copy) -- Experiments with heating and cooling / Isabel Thomas (1 copy) -- Fire / Andrew Charman (1 copy) -- Junior scientists. Experiment with heat / Sophie Lockwood (1 copy) -- Heat / Joseph Midthun (1 copy) -- Temperature: heating up and cooling down / Darlene Stille (1 copy) -- Hot and cold / Allan Fowler (1 copies) -- Heat / Sandra Iversen (2 copies). Grades: 3. This kit contains books that will help students understand thermal energy, temperature and heat. |
| 536 THR | Thermal energy [kit]: the science behind heat. [Burnaby, B.C.] : assembled by Burnaby School District, 2018. Kit contains the following titles: How heat moves / Sharon Coan (1 copy) -- Hot and cold / Siân Smith (1 copy) -- The science behind heat / Darlene R. Stille (1 copy) -- Energy: heat, light, and fuel / Darlene Stille (1 copy) -- What makes fire burn? / Walter LaPlante (1 copy) -- Heat / Darlene Lauw (1 copy) --Heat / Joseph Midthun (1 copy) -- Temperature: heating up and cooling down / Darlene Stille (1 copy) -- Hot and cold / Allan Fowler (1 copy) -- Experiments with heating and cooling / Isabel Thomas (1 copy) -- Heat / Sandra Iversen (2 copies). Grades: 3. This kit contains books that will help students understand thermal energy, temperature and heat. |
| 551.5271 FEE | Feel the heat [kit]. [Burnaby, B.C.] : assembled by Burnaby School District, 2017. This kit contains the following titles: Summer sun risin' / W. Nikola-Lisa -- The Sun: our nearest star / Franklyn M. Branley. Includes a portion of the teacher's guide Picture-perfect STEM lessons, K-2: using children's books to inspire STEM learning / Emily Morgan and Karen Ansberry. Grades: K 1 2. Picture-perfect science integrates reading comprehension and content knowledge in different areas of science. In this unit, "Students explore the warming effects of sunlight on Earth's surface by comparing the temperatures of sunny surfaces and shady surfaces on their school grounds."--Page 111 of teacher's guide. |
| DVD 500.2 INT | Introduction to physical science [videorecording]. Silver Spring, MD: Discovery Education;, 2005. Solid, liquid and gas -- Heat and matter -- Thermal and light energy -- Forces and gravity. "Vibrant images capture students' attention for learning about various aspects of physical science: solids, liquids and gases; heat and matter; thermal and light energy; forces and gravity. Topics are segmented for instructional ease. Each segment begins and ends with focus questions while the basic topic information is clearly presented with some animated graphics."--ERAC. |
| DVD 523.7 SUN | The Sun [videorecording]. Classroom ed. Elk Grove Village, Ill.: Disney Educational Productions;, 2008. Host, Bill Nye. Grades: 4 5 6 7. Bill Nye sheds light on solar flares, eclipses, sunspots, fusion, and solar energy, and visits an enormous solar power farm to demonstrate how the sun is the source of energy for all living things on Earth. |
| DVD 530 PHY | Physical science [videorecording]: the basics. Silver Spring, MD: Discovery Communications;, c2005. Part one: Matter -- Solid, liquid, gas -- Sound -- Gravity and buoyancy -- Light -- Heat -- Electricity -- Magnetism -- Measuring physical properties -- Materials -- The position of an object -- Pushing and pulling objects. Part two: Electricity and magnetism -- Energy -- Forces and motion -- Matter -- Tools and machines -- Waves, light and sound. Produced by TLC Elementary School and Summer productions. Grades: K 1 2. "From electricity and magnetism to light and sound, introduce young students to a wide variety of physical science topics." --Container. |
| DVD 536 HEA | Heat [videorecording]. (Series: Bill Nye, the science guy). Elk Grove Village, IL : Disney Educational Productions, c2005, c1996.  Grades: 4 5 6 7. "Learn what heat is and about its three forms: conduction, convection and radiation."--Container |
| SPF 531.6 ENE | Énergie thermique [kit] : chaleur et friction. [Burnaby, B.C.] : assembled by Burnaby School District, 2017. Kit contains the following titles: Adhérer ou glisser? / Jane Burns (6 copies) -- Gonflée d'air chaud / May Nelson (6 copies) -- Forces, matière et énergie / Leslie Garrett (1 copy). Grades: 3 4 (French Immersion). These French-language books explore the concepts of thermal energy, focusing on heat and friction. |
| TR 531.6 ROB | Robertson, William C. Stop faking it! Energy. Arlington, Va.: NSTA Press, c2002. Recognizing energy -- Energy on the move -- It slices, it dices--it gathers dust! -- Temp-a-chur and thermal energy -- Close the door--you're letting the cold in! -- Taming energy. Audience: Professional. "At the book's heart are easy-to-grasp explanations of energy basics--work, kinetic energy, potential energy, and the transformation of energy--and energy as it relates to simple machines, heat energy, temperature, and heat transfer. Irreverent author Bill Robertson suggests activities that bring the basic concepts of energy to life with common household objects." --Cover p. [4]. |