Big Idea *Newton’s three laws of motion describe the relationship between force and motion.*

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| **Science 6 - Gravity DLRC Resources November 2018** | |
| 531.1 ROL | Roller coasters [kit]. [Burnaby, B.C.: assembled by Burnaby School District], 2014. This kit contains the following titles: I fall down / Vicki Cobb -- Motion: push and pull, fast and slow / Darlene Stille -- Roller coaster / Marla Frazee. 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 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 explore ways to change the speed and direction of a rolling object by building roller coasters out of pipe insulation." --Page 133 of teacher's guide. |
| 531.14 GRA | Gravity [kit]. [Burnaby, B.C.] : assembled by Burnaby School District, 2016. Kit contains the following titles: Who was Isaac Newton? / Janet B. Pascal -- Janice VanCleave's gravity: spectacular science projects / Janice VanCleave -- Gravity: simple experiments for young scientists / Larry White -- Gravity is a mystery / Franklyn M. Branley -- Gravity / Joseph Midthun -- Dictionary of forces, matter, and energy / Leslie Garrett -- It's falling, falling! / Ji-an Yang -- Roller coaster science: 50 wet, wacky, wild, dizzy experiments about things kids like best / Jim Wiese. DVD: Gravity (25 min.). Grades: 5 6 7. The books in this kit describe the discovery of gravity, and provide information and experiments for exploring the force of gravity. |
| 531.5 SLI | Slinky drop [kit]. [Burnaby, B.C.] : assembled by Burnaby School District, 2016. Grades: 4 5 6 7. The Slinky walking spring toy is used to introduce students to the concepts of force (gravity, tension, Newton's Laws) and energy transfer (potential to kinetic). Includes suggested activities from Burnaby School District's Math and Science Program Consultant. |
| 621.815 MAR | Marble mania super freestyle maze [game]. Phoenix, AZ: The Learning Journey International, 2014. Grades: 4 5 6 7. Students can construct a marble maze using a variety of building pieces, including blocks, pulleys and gears, and send marbles to travel down the ramps. Allows students to observe in a real-world context principles of engineering, as well as force, motion and gravity. |
| 621.815 RUB | Rube Goldberg machines [kit]. CALL DLRC (639903) TO BOOK. [Burnaby, B.C.] : assembled by Burnaby School District, 2017. Grades: 4 5 6 7. This kit provides materials for designing and building a complex, "Rube Goldberg"-style machine, which may provide the practical basis for exploring mathematical and scientific concepts, including gravity, weight, friction, angles (geometry), simple machines, and energy transfer. "A Rube Goldberg machine is a deliberately complex contraption in which a series of devices that perform simple tasks are linked together to produce a domino effect in which activating one device triggers the next device in the sequence."--Wikipedia. This kit may be used to support ADST (Applied Design, Science & Technology) curriculum. |
| 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 531.14 GRV | Gravity [videorecording]. Classroom ed. Elk Grove Village, Ill.: Disney Educational Productions, c2004. Host and presenter, Bill Nye. Grades: 4 5 6 7. Have you ever wondered what holds the ocean on the Earth? Or what makes the Earth round? Perhaps you've thought about what holds humans to the ground? Host Bill Nye provides the explanation for these and other questions about the Earth's gravity. |
| ELL 531.14 MOO | Moore, Rob. Why do balls bounce? [kit]: and other questions about movement. [Burnaby, B.C.] : [Burnaby School District], 2012. Why do balls bounce? : and other questions about movement / Rob Moore. Cambridge, UK: Cambridge University Press, c2010. Intermediate ELL Level 3. What is gravity? Why don't skydivers fly off into space? Do heavy objects fall faster than light objects? You can find the answers to these and other questions about gravity in this book. --Cover p. [4]. |
| SPF 531.14 GRA | Gravité [kit] : la force g! [Burnaby, B.C.] : assembled by Burnaby School District, 2017. Kit contains the following titles: Géniale, la force g! / Julia Wall (6 copies) -- Forces et mouvement / John Graham (3 copies) -- Forces, matière et énergie / Leslie Garrett (2 copies) -- Isaac Newton : le père de la science moderne / Philip Steele (1 copy). Grades: 6 (French Immersion). The books in this French-language kit describe the discovery of gravity, and provide information and experiments for exploring the force of gravity, force, and movement. |
| SPF 531.6 COU | Sohn, Emily. Coup d'oeil sur les forces et le mouvement avec Max Axiome, le super scientifique [kit]. [Burnaby, B.C.] : assembled by Burnaby School District, 2012. Coup d'oeil sur les forces et le mouvement avec Max Axiome le super scientifique. Montréal : Chenelière Éducation, c2008. Grades: 4 5 6 7 8 9 (French Immersion). "Un parc d'attractions offre bien plus que des manèges quand Max Axiome s'y trouve! Accompagne-le dans ses sauts à l'élastique et ses tours de montagnes russes: tu en apprendras plus sur la vitesse, l'accélération, l'inertie, la friction et la force gravitationnelle."--Page [4] of cover. |