

Picture Perfect Science Lessons – Using Children’s Books to Guide Inquiry, 3-6 – Technology Integration

Chapter 6 – Earthlets

[Solids and Liquids](#) - A virtual laboratory in which children can investigate the temperature at which various solids turn to liquids

[Magnets and Springs](#) – which objects will the magnet attract?

[PBS Kids Measurement Games](#) – many to choose from

Chapter 7 – Name That Shell

[Dive and Discover](#) – virtual expeditions to the sea floor

[Current Capers](#) – help Herman the Hermit Crab in his new job as a travel agent

[Young Explorer](#) – National Geographic online magazine with lesson plans, discussion questions, worksheets and more. Click **More Issues** at the bottom of the screen to access all content.

[Name That Shell](#) - In this interactive activity from the NOVA Web site, test your ability to identify the different shell types that commonly feature in firework displays. (Register for free for Teacher’s Domain)

Chapter 8 – Rice is Life

[Free Rice](#) – for each vocabulary question answered correctly, 10 grains of rice will be donated to help end hunger

[Life Cycles](#) – Plants – interactive game

[Helping Plants Grow Well](#) – interactive game

Chapter 9 – What’s Poppin’?

[Popcorn.org](#) – two games – What Do You Know About Popcorn? And Pop Corn Pong

[Watch Popcorn Pop](#) – slow motion video

[Reversible and Irreversible Changes](#) – BBC science simulation

Chapter 10 – Mystery Pellets

[Food Chain Game](#) – Kid’s Corner – drag and drop items in the food chain in correct order

[Chain Reaction](#) – build a food chain

[Fun with Food Webs](#) – build a meadow food web, an arctic food web, and a pond food web

Chapter 11 – Close Encounters of the Symbiotic Kind

[Habitats](#) – BBC interactive game

[Plants and Animals in the Local Environment](#) – BBC interactive game

[Interdependence and Adaptation](#) – BBC interactive game

[Young Explorer](#) – National Geographic online magazine with lesson plans, discussion questions, worksheets and more. Click **More Issues** at the bottom of the screen to access all content.

[Analyzing an Ecosystem](#) – flash interactive for grades 3-8. (Register for free for Teacher’s Domain)

[Forest Life](#) – Virtual Field Trip to a forest

Chapter 12 – Turtle Hurdles

[Young Explorer](#) – National Geographic online magazine with lesson plans, discussion questions, worksheets and more. Click **More Issues** at the bottom of the screen to access all content.

[Switcheroo Zoo](#) – make your own new animals and/or build an online habitat.

[ARKive](#) – Images of Life on Earth – enter the search term “turtle” to find tons of images and videos of turtles in their natural habitats. This site has an enormous amount of information about many animals – including facts, descriptions, habitats, threats, and conservation. For example, [here](#) is the page on [Green Turtles](#) – there are image slideshows, videos, and links to species information.

Chapter 13 – Oil Spill!

[Environmental Kids Club – Game Room](#) – a collection of games that teach about the environment and pollution

[EcoKids](#) – Canadian site with many eco-games and activities

[Wetlands and Wonder](#) – Reconnecting Children with Nearby Nature – video by the US Environmental Protection Agency

[What Happens When an Oil Spill Occurs](#) – interactive teaching tool that takes students step by step through what happens in an oil spill such as the *Exxon Valdez* and how we can predict, monitor, and contain the impact of an oil spill. (Register for free for Teacher’s Domain)

Chapter 14 – Sheep in a Jeep

[Forces and Movement](#) – ages 6-7 – BBC Interactive Simulation

[Friction](#) – ages 8-9 – BBC Interactive Simulation

[Forces in Action](#) – ages 10-11 – BBC Interactive Simulation

[Forces, Motion, and Simple Machines](#) - Web Quest

[Lunar Lander](#) – interactive simulation of the real motion of the lunar lander with the correct mass, thrust, fuel consumption rate, and lunar gravity

Chapter 15 – Sounds of Science

[Sound](#) – this simulation allows you to see sound waves. Adjust the frequency, volume, and harmonic content and you can see and hear how the wave changes. Move the listener around and hear what she hears.

[The Magic School Bus Gets an Earful](#) – match sounds with the things that make them

[Understanding Vibration and Pitch](#) – online QuickTime video (register for free for Teacher’s Domain)

[Pitch – Straw Kazoo](#) – includes an online QuickTime video and a one page .pdf handout for creating a straw kazoo (register for free for Teacher’s Domain)

[Online Tuning Fork](#) – three tuning forks – E, A, and C

[Sound and Hearing](#) – interactive simulation, ages 5-6

[Changing Sounds](#) – interactive simulation, ages 9-10

Chapter 16 – Chemical Change Café

[Gasses around us](#) – Virtual lab in which children can investigate the point at which a liquid changes into a gas and gas changes back to a liquid – students also sort solids, liquids, and gasses, and take a quiz

[Changing State](#) – see what happens when you cool and heat water

[Cooking With Sugar](#) - This activity presents a scientific definition of sugar, including an illustration of a sugar molecule; explains how candy makers prevent crystallization from ruining their creations; and addresses the question: Is sugar bad for your teeth? (Register for free for Teacher's Domain)

[Barfing Pumpkin](#) – Chemical change video – includes teacher material and a student booklet. (Register for free for Teacher's Domain)

Chapter 17 – The Changing Moon

[Phases of the Moon](#) – interactive flash activity. (Register for free for Teacher's Domain)

[Eclipse of the Century](#) – QuickTime video. (Register for free for Teacher's Domain)

[Wonderville – Phases of the Moon](#) - Hayley, Tommy and Proton discover the night sky as they track the moon. Explore why the moon looks the way it does during its different phases and learn the moon's position relative to Earth as it completes its monthly orbit.

[Moon Simulation](#) – see the phases of the moon, day by day, as it makes its monthly orbit.

[Lunar Phase Simulator](#) – shows the moon phase and the observer's time (day and night)

[Solar Eclipses](#) – short video about solar eclipses. Page includes discussion questions and background information. (Register for free for Teacher's Domain)

Chapter 18 – Day and Night

[Earth in Motion](#) – flash interactive showing Earth's orbit around the Sun, together with the tilt of its axis, results in periodic climate changes around the globe known as seasons.

[Solar Eclipses](#) – short video about solar eclipses. Page includes discussion questions and background information. (Register for free for Teacher's Domain)

[Eclipse of the Century](#) – QuickTime video. (Register for free for Teacher's Domain)

[Earth, Sun, and Moon](#) – BBC Interactive activity

[Seasons Interactive](#) – shows data and the position of the Earth in relation to the Sun for each month of the year.

Chapter 19 – Grand Canyon

[Rock Cycle Animation](#) – flash interactive activity (Register for free for Teacher’s Domain)

[The Grand Canyon](#) – How It Formed – QuickTime video – site includes discussion questions and background information. (Register for free for Teacher’s Domain)

[Geology of Death Valley](#) - This QuickTime video examines the landforms of Death Valley and how they came to be. (Register for free for Teacher’s Domain)

[Kinetic City – Shape It Up](#) – flash interactive – choose the correct force of nature and length of time for the form in the first image to become the form in the second image.

Chapter 20 – Brainstorm – From Ideas to Invention (Investigations)

[PBS SciGirls](#) – register for free – then check out the videos and the projects, including “Making Things” – there are tons of other resources at this site

[Goldburger to Go](#) – perfect the Rube Goldberg invention for serving lunch

[EdHeads](#) – includes: **design a cell phone**, weather, virtual surgery, simple machines

[Girls Communicating Career Connections](#) – webcast archive - youth-produced, video series and companion educator materials on science and engineering careers

[The Fun Works](#) – explore careers you never knew existed