1. Audubon's Birds of America
Online digitized version of the complete John James Audubon's "Birds of America". Images include original captions and descriptive information. Includes zooming and enlarging software to enhance images. Also includes all the original text and all 435 images from the complete double elephant folio set.
http://digital.library.pitt.edu/a/audubon/

2. MedMyst: Medical Mysteries on the Web
Medical Mysteries is a problem-based adventure game that engages the player in the role of scientist, historian, and detective. There are three missions, each with its own learning objectives. The knowledge gained from each mission will help students understand how infectious diseases are spread. Each of the 4 distinct Medical Mysteries includes a complete set of teaching materials with learning objectives, correlations with the National Science Educational Content Standards and the National Health Education Standards, suggestions for extension activities, lesson plans, and testing activities.
http://medmyst.rice.edu/index.html

3. Ocean Currents
Objectives: 1) Describe how ocean currents are formed. 2) Describe the difference between upwelling and downwelling. 3) Define the Coriolis Effect. 4) Describe the relationship between ocean currents and global climate. 5) Describe the relationship between ocean currents and global fisheries.
http://www.montereyinstitute.org/courses/Environmental%20Science/course%20files/multimedia/noaa/lesson08.html

4. Launchball
Highly interactive and compelling online physics game from the Science Museum in Britain. Launchball uses a physics engine to demonstrate concepts which are abstract and yet physically real in some way. The object is to launch a ball, get it through an obstacle course, and sink it into the hole at the end. A range of gadgets help students along the way, such as fans, batteries, torches and steam generators. Students learn about the science behind these as they play. The facts are usually fascinating, such as the temperature of the area around a lightning strike is around 30,000 degrees Celsius, which is five times hotter than the sun. Students complete tasks such as bouncing the ball into the hole using a big spring or use the fan to blow it onto a conveyor belt. They need to determine how to make the fan or conveyor belt actually work. Every level has different problems to work on. Sometimes it takes lots of tries to find the solution, illustrating the way scientists "do" science in the real world. The game also includes an option to design your own Launchball level and share it with your friends.
http://www.sciencemuseum.org.uk/launchpad/launchball/

5. Newton's First Law
Objectives: 1) Analyze situations which a particle remains at rest, or moves with constant velocity, under the influence of several forces. 2) Understand and apply the relation between the force that acts on a body and the resulting change in the body's velocity. 3) Analyze situations in which a body moves with specified acceleration under the influence of one or more forces so they can determine the magnitude and direction of the net force or of one of the forces that makes up the net force.
http://www.montereyinstitute.org/courses/Introductory%20Physics%20I/course%20files/multimedia/lesson03/lessonp.html

6. Making Sense of Modern Art
Comprehensive online guide to the San Francisco Museum of Modern Art's (SFMOMA) permanent collection. Learners are able to to "zoom in" on full-screen details of individual artworks, explore excerpts from archival videos and films, and listen to commentary by artists, art historians, critics, and collectors.
http://www.sfmoma.org/MSoMA/index.html

7. Investigating Bellini's Feast of the Gods
It has always been known that the *Feast of the Gods* (right) was painted by two great artists, Giovanni Bellini (1427-1516) and Titian (1490-1576). In the years since, however, a more complex story was lost... only to be rediscovered four centuries later. This exhibit is about the rediscovery of this painting's past.
http://www.webexhibits.org/feast/

8. Angry Red Planet: Simulated spaceflight to Mars
Learners help with a simulated flight to Mars. In this simulation, four "bionauts" are sealed into identical pods containing plants, animals and water. The goal is for them to survive for six months receiving no water, food or air from outside. The learner must monitor the conditions in each pod, simulating Mission Control back on Earth. However, something is wrong in one of the pods. The oxygen is getting low - why? Learners use their literacy, inquiry-based learning, problem-solving logic, and inductive and deductive reasoning to solve the mystery. "Angry Red Planet" gives students hands-on experience in problem-based learning with facts about respiration, ecosystems and ecological cycles, chemical and biochemical reactions, carbon dioxide poisoning, and the effects of stress on human physiology and psychology. They must learn how to read graphs and evaluate data to solve the mystery.
http://www.accessexcellence.org/AE/mspot/arp/

9. FBI Kids Page
This site is for grades K-5, and follows a field trip format. Provides a detailed overview of fingerprinting, DNA, jobs at the FBI, Internet safety, working dogs, abductions and gun safety. Ends with a cross word puzzle review and some relevant games.
http://www.fbi.gov/kids/k5th/kidsk5th.htm

10. The Architecture and Development of New York City
On this Web site, architectural historian Andrew Dolkart of Columbia University examines the history and development of New York City's commercial, residential, and institutional architecture. Features short videos with commentary and images. Also maps, architectural timelines, architect biographies, a glossary, and individual case studies on significant buildings.
http://ci.columbia.edu/0240s/index.html

11. PowerUp
PowerUp is free multiplayer online game, that challenges teenagers to help save the planet "Helios" from ecological disaster. The game is part of IBM's TryScience initiative, which encourages students to investigate, discover, and try science by linking it to engaging, real-world activities. PowerUp can be played alone or with other students and features a planet in near ecological ruin, where three missions to supply solar, wind, and water power must be solved before sandstorms, floods, or SmogGobs thwart the rescue. IBM devised the three-dimensional virtual game to engage students in learning about engineering, energy, and diversity awareness. PowerUp instructs learners in engineering principles through simulations such as riding over rugged mountains in buggies to build solar towers or searching through grim junk yards to repair wind turbines. Classroom lesson plans covering energy transformation, and an interactive module where kids can learn about technologies

to build virtual worlds, also accompany the game. To ensure a safe environment, avatars use phrase-based chats to interact during missions.
http://www.poweruptheGame.org/home.html

12. Painting in the Dutch Golden Age: A Profile of the Seventeenth Century
This book is a resource for teachers introducing seventeenth-century Dutch culture and its early influence in North America. It can be used for engaging students on such subjects as world history, the founding of the United States, visual and cultural analysis, geography, world religion and social studies. Contents: (1) Profile of the Dutch Republic. (2) A golden Age for the Arts. (3) Life in the City and Countryside. (4) Landscape Painting. (5) Genre Painting. (6) Still-Life Painting. (7) Portraiture. (8) History Painting. As well as high quality art reproductions, the book also includes a timeline, a listing of print and online resources, and a glossary.
(No URL – need to open PDF via Orange Grove)

13. Alice
Alice is an innovative 3D programming environment that makes it easy to create an animation for telling a story, playing an interactive game, or a video to share on the web. Alice is a teaching tool for introductory computing. It uses 3D graphics and a drag-and-drop interface to facilitate a more engaging, less frustrating first programming experience.
http://www.alice.org/#

14. The New York Philharmonic Kidzone
Interactive website that includes a variety of virtual spaces: Musician's Lounge, Composers' Gallery, Instrument Storage Room, Instrument Laboratory, Conductor/Soloist Dressing Rooms, Newsstand, Games, and Composer's Workshop. Students can experiment with interactive instruments, compose music, create instruments for online or for off-line use, as well as learn about composers and musicians.
http://www.nyphilkids.org/main.phtml

15. Adventures of the Agronauts
Adventures of the Agronauts, a free, online, interactive science curriculum with a space biology theme for elementary students. This curriculum was created to meet the NC Standard Course of Study for 3rd Grade Science. The Agronauts undertake six space missions with a goal of determining how to grow plants on the Moon.
http://www.ncsu.edu/project/agronauts/index.htm