**Sixth Grade Digital Resources**

**Virtual Labs and Activities including some hands-on labs**

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| **Unit** | **Description/Title** | **Link** |
| 1 | How is a Controlled experiment performed? Temperature and color. | <http://www.glencoe.com/sites/common_assets/science/virtual_labs/E16/E16.html> |
| 1 | What strategies are involved in solving a science problem? Compost pile | <http://www.glencoe.com/sites/common_assets/science/virtual_labs/ES01/ES01.html> |
| 1 | Experimental Design: How does your garden grow? | <http://gtm-media.discoveryeducation.com/videos/dsc/externalApplications/accessible/virtual_labs-es/Plants/index.html> |
| 1 | Experimental Design Activity involving scenarios surrounding researching and performing experiments. | <http://rms-ecsd-fl.schoolloop.com/file/1431760227859/1316929387358/7398657494410494606.pdf> |
| 1 | A Scientist is Like a Detective | <http://teachertech.rice.edu/Participants/louviere/br1.html> |

**Video Clips and Songs**

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| **Unit** | **Description/Title** | **Link** |
| 1 | Mr. Parr-Scientific Method Song | [www.google.com/search?q=Mr.+Parr+Scientific+Method&ie=utf-8&oe=utf-8&gws\_rd=ssl](http://www.google.com/search?q=Mr.+Parr+Scientific+Method&ie=utf-8&oe=utf-8&gws_rd=ssl) |
| 1 | Study Jams Scientific Method | <http://studyjams.scholastic.com/studyjams/jams/science/scientific-inquiry/scientific-methods.htm> |

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| **Unit** | **Description/Title** | **Link** |
| 2 | How do glaciers shape the land? | <http://www.glencoe.com/sites/common_assets/science/virtual_labs/ES07/ES07.html> |
| 2 | How can locations in the United States be identified by their geographic features? | <http://www.glencoe.com/sites/common_assets/science/virtual_labs/ES05/ES05.html> |
| 2 | How are materials from the earth broken down? Erosion/Weathering | <http://www.glencoe.com/sites/common_assets/science/virtual_labs/E06/E06.html> |
| 2 | How do certain factors affect the erosion of soil by water? | <http://www.glencoe.com/sites/common_assets/science/virtual_labs/ES08/ES08.html> |
| 2 | Where do most earthquake epicenters and volcanoes occur? | <http://www.glencoe.com/sites/common_assets/science/virtual_labs/E27/E27.html> |
| 2 | Edheads Weather | <http://www.edheads.org/activities/weather/> |
| 2 | Shape It Up! Weathering and Erosion | <http://schoolmediainteractive.com/view/object/interactive/6EF46CAA2D38E0EABB11A57BAFFB1753/099459804A638DAB6873167F7B90E2F4> |
| 2 | Weathering and Erosion Webquest | <http://www.mrpierceonline.com/weathering-and-erosion-webquest/> |
| 2 | Adjust mountain snowfall and temperature to see the glacier grow and shrink. Use scientific tools to measure thickness, velocity and glacial budget. | <http://phet.colorado.edu/en/simulation/glaciers> |

**Video Clips and Songs**

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| **Unit** | **Description/Title** | **Link** |
| 2 | Weathering and Erosion Song-Mr. Parr | <https://www.youtube.com/watch?v=2311yO5opVk&list=PLqTEqBBPoqwVTbS_6i2lsAmWTaW9312Fl&index=54> |
| 2 | Erosion Lab Video | <https://www.youtube.com/watch?v=ZNJe6hrdL3M>  |
| 2 | Weathering and Erosion | <https://www.youtube.com/watch?v=B3iDcDGqFG8> |
| 2 | Study Jams Weathering and Erosion | <https://www.youtube.com/watch?v=lyysL02ZvQ8> |

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| **Unit** | **Description/Title** | **Link** |
| 3 | What is the structure of Earth's atmosphere? | <http://www.glencoe.com/sites/common_assets/science/virtual_labs/ES14/ES14.html> |
| 3 | How does thermal energy affect the state of a substance? | <http://www.glencoe.com/sites/common_assets/science/virtual_labs/E17/E17.html> |
| 3 | Ocean Currents | <http://www.science-class.net/Oceanography/currents/rubber_duck_data_2015.pdf><http://education.nationalgeographic.com/education/activity/mapping-ocean-currents/?ar_a=1> |
| 3 | Atmosphere Changes in the Air | <http://forces.si.edu/Atmosphere/> |
| 3 | Coriolis Effect Interactive | <http://www.montereyinstitute.org/noaa/lesson08/l8ex1.htm> |
| 3 | Land and Sea Breezes Animation | <http://www.classzone.com/books/earth_science/terc/content/visualizations/es1903/es1903page01.cfm> |

**Video Clips and Songs**

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| **Unit** | **Description/Title** | **Link** |
| 3 | Global Wind/Ocean Currents | http://www.windows2universe.org/earth/Atmosphere/global\_circulation\_lsop\_video.html |
| 3 | Mr. Parr Atmosphere  | <http://www.cleanvideosearch.com/media/action/yt/watch?v=dQPyNY2WIdw> |
| 3 | Mr. Parr Conduction, Convection and Radiation | <http://www.cleanvideosearch.com/media/action/yt/watch?v=yUEPGMnRqGs> |
| 3 | Hot to Cold | <http://www.cleanvideosearch.com/media/action/yt/watch?videoId=6sUOMds_zmE> |

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| **Unit** | **Description/Title** | **Link** |
| 4 | How do meteorologists predict the weather? | <http://www.glencoe.com/sites/common_assets/science/virtual_labs/ES15/ES15.swf> |
| 4 | How can locations be identified by their climate and topography? | <http://www.glencoe.com/sites/common_assets/science/virtual_labs/ES16/ES16.swf> |
| 4 | Make a hurricane activity | <http://scied.ucar.edu/make-hurricane> |
| 4 | Make a thunderstorm activity | <http://scied.ucar.edu/make-thunderstorm> |
| 4 | Make a snowstorm activity | <http://scied.ucar.edu/create-snowstorm-interactive-demo-video> |
| 4 | Climate of Concern | <http://know.climateofconcern.org/index.php?option=com_content&task=article&id=113> |
| 4 | Weather/Climate around a mountain | [www.pbs.org/wgbh/nova/kilimanjaro/weat-flash.html](http://www.pbs.org/wgbh/nova/kilimanjaro/weat-flash.html) |
| 4 | Water cycle | [www.epa.gov/ogwdw/kids/flash/flash\_watercycle.html](http://www.epa.gov/ogwdw/kids/flash/flash_watercycle.html) |
| 4 | Weather Elements-Current Florida Weather  | <http://fawn.ifas.ufl.edu/> |
| 4 |  Air Fronts/Cloud Formation | <http://nuweb.neu.edu/bmaheswaran/phyu121/data/ch13/anim/anim1306.htm> |
| 4 | Tornado  | <http://whyfiles.org/013tornado/3.html> |
| 4 | Natural Disasters | [www.stopdisastersgame.org/en/home.html](http://www.stopdisastersgame.org/en/home.html) |

**Video Clips and Songs**

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| **Unit** | **Description/Title** | **Link** |
| 4 | Mr. Davies water cycle song | http://www.cleanvideosearch.com/media/action/yt/watch?v=u3QwLYfgwP0 |
| 4 | Mr. Parr’s water cycle song | <http://www.cleanvideosearch.com/media/action/yt/watch?v=o3BVa7PH_JE> |
| 4 | weather and climate | <http://www.cleanvideosearch.com/media/action/yt/watch?v=VHgyOa70Q7Y> |

**Virtual Labs and Activities including some hands-on labs**

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| **Unit** | **Description/Title** | **Link** |
| 6 | How are living things classified into groups? | <http://www.glencoe.com/sites/common_assets/science/virtual_labs/E07/E07.swf> |
| 6 | How do animal and plant cells work? | <http://www.glencoe.com/sites/common_assets/science/virtual_labs/E08/E08.html> |
| 6 | Under what conditions do cells gain or lose water? | <http://www.glencoe.com/sites/common_assets/science/virtual_labs/LS03/LS03.html> |
| 6 | How can microscopic protists and fungi be characterized? | <http://www.glencoe.com/sites/common_assets/science/virtual_labs/LS09/LS09.html> |
| 6 | Cells Alive | <http://www.cellsalive.com/cells/cell_model.htm> |
| 6 | Parts of a Cell | <http://www.iknowthat.com/ScienceIllustrations/cell/science_desk.swf> |
| 6 | A Typical Animal Cell | <https://www.wisc-online.com/learn/natural-science/life-science/ap11403/a-typical-animal-cell> |
| 6 | Cell Explorer | <http://www.exploratorium.edu/traits/cell_explorer.html> |
| 6 | Cell Inspector: | <http://www.harcourtschool.com/activity/cell/cell.htm> |
| 6 | Cell Game | <http://www.sheppardsoftware.com/health/anatomy/cell/index.htm> |
| 6 | Cell Structure | <http://www.wiley.com/legacy/college/boyer/0470003790/animations/cell_structure/cell_structure.htm> |
| 6 | Cell Craft | <http://www.carolina.com/teacher-resources/Interactive/online-game-cell-structure-cellcraft-biology/tr11062.tr> |
| 6 | Microscope Tutorial | <http://davesolon.com/scopetrain/scopeRO.swf> |
| 6 | Virtual Microscope | <https://www.udel.edu/biology/ketcham/microscope/scope.html><http://www.knowitall.org/hobbyShop/microscope/microroom.swf> |

**Video Clips and Songs**

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| **Unit** | **Description/Title** | **Link** |
| 6 | Mr. Parr Cells | <http://www.cleanvideosearch.com/media/action/yt/watch?v=wRZthGlzEUc> |
| 6 | Parts of a Microscope | <https://www.youtube.com/watch?v=Swcz_TJMz0I> |
| 6 | What are We Made Of | <http://www.cleanvideosearch.com/media/action/yt/watch?v=gFuEo2ccTPA> |

**Virtual Labs and Activities including some hands-on labs**

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| **Unit** | **Description/Title** | **Link** |
| 7 | How do the parts of the respiratory system work together? | <http://www.glencoe.com/sites/common_assets/science/virtual_labs/LS24/LS24.html> |
| 7 | What are the stages of development before birth? | <http://www.glencoe.com/sites/common_assets/science/virtual_labs/LS26/LS26.swf> |
| 7 | How does the body protect itself against foreign substances? (High Level) Blood Types | <http://www.glencoe.com/sites/common_assets/science/virtual_labs/LS27/LS27.html> |
| 7 | Respiratory System: Sneeze Mystery  | <http://www.accessexcellence.org/AE/mspot/sneeze/> |
| 7 | All Systems are Go | <http://sciencenetlinks.com/interactives/systems.html> |
| 7 | Quizzes on Body Systems | <http://www.proprofs.com/quiz-school/quizshow.php?title=human-organ-systems&q=1> |
| 7 | Build a Skeleton | <http://www.childrensuniversity.manchester.ac.uk/interactives/science/bodyandmedicine/theskeleton/> |
| 7 | Body Control Center | <http://www.pbslearningmedia.org/asset/tdc02_int_bodycontrol> |
| 7 | Skelton System | <http://www.abcya.com/skeletal_system.htm><http://www.anatomyarcade.com/games/WAB/WAB.html> |
| 7 | Muscles | <http://www.childrensuniversity.manchester.ac.uk/media/services/thechildrensuniversityofmanchester/flash/exercise_3_muscles.swfs.php?movie=Skeletomuscular> |

**Video Clips and Songs**

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| **Unit** | **Description/Title** | **Link** |
| 7 | Mr. Parr Heart | <https://www.youtube.com/watch?v=p-wilmN80XE> |
| 7 | Mr. Parr Respiratory System | <https://www.youtube.com/watch?v=p4zOXOM6wg> |
| 7 | Mr. Parr- Bones | <https://www.youtube.com/watch?v=UYSOe06j4ps> |
| 7 | Mr. Parr- Brain | <https://www.youtube.com/watch?v=CDYe7oe3iLM> |
| 7 | Mr. Parr- Urinary System | <https://www.youtube.com/watch?v=K3Z-Lt58H0s> |
| 7 | Mr. Parr- Integumentary system | <https://www.youtube.com/watch?v=MeTaBniB0ok&spfreload=10> |
| 7 | Mr. Parr- Homeostasis | <https://www.youtube.com/watch?v=1iPndNB7mjw> |
| 7 | Amoeba Sisters | <http://www.cleanvideosearch.com/media/action/yt/watch?videoId=nnjmrrQ6xOs> |
| 7 | Skeletomuscular Video | <http://www.kidsknowit.com/interactive-educational-movies/free-online-movies.php?movie=Skeletomuscular> |
| 7 | Making Poo- the Digestive System | <http://www.cleanvideosearch.com/media/action/yt/watch?v=aemI64NAK08> |
| 7 | Videos for most systems | <http://kidshealth.org/kid/> |

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| **Unit** | **Description/Title** | **Link** |
| 8 | Medical Mysteries: Disease Outbreak | <http://medmyst.rice.edu/> |
| 8 | Disease Detective | <http://www.pbs.org/wgbh/nova/body/disease-detective.html> |

**Video Clips and Songs**

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| **Unit** | **Description/Title** | **Link** |
| 8 | Kids Health Immune system | <https://www.youtube.com/watch?v=WJEc2GDEfz8> |
| 8 | Mr. Parr Pathogens | <http://www.cleanvideosearch.com/media/action/yt/watch?v=Hr7jjlZI6NA> |
| 8 | Video Clips and Quizzes for disease and immunity issues | <http://kidshealth.org/kid/> |

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| **Unit** | **Description/Title** | **Link** |
| 5 | Force and Motion links to activities | <http://www.learningscience.org/psc2bmotionforces.htm> |
| 5 | Motion and Speed | <http://www.teachersdomain.org/asset/phy03_int_accel/> |
| 5 | Gravity and Motion | <http://www.planetseed.com/uploadedFiles/Science/Laboratory/Air_and_Space/Galileo_Drops_the_Ball/anim/en/index.html?width=740&height=570&popup=true> |
| 5 | How does horizontal motion affect vertical motion? (High Level) | <http://www.glencoe.com/sites/common_assets/science/virtual_labs/PS04/PS04.html> |
| 5 | What are the relationships between kinetic energy and potential energy? | <http://www.glencoe.com/sites/common_assets/science/virtual_labs/PS05/PS05.html> |
| 5 | JASON Digital lab: Roller Coaster | <http://content3.jason.org/resource_content/content/digitallab/4859/misc_content/public/coaster.html> |
| 5 | Newton’s Laws of Motion |  <http://www.sciencechannel.com/games-and-interactives/newtons-laws-of-motion-interactive/> |
| 5 | Newton’s Laws of Motion |  [**http://phet.colorado.edu/en/simulation/forces-and-motion-basics**](http://phet.colorado.edu/en/simulation/forces-and-motion-basics) |
| 5 | Skate park physics the basics | [**http://phet.colorado.edu/en/simulation/energy-skate-park-basics**](http://phet.colorado.edu/en/simulation/energy-skate-park-basics) |
| 5 | Interactive gravity and orbits | <http://phet.colorado.edu/en/simulation/gravity-and-orbits> |
| 5 | Learn about position, velocity, and acceleration graphs | [**http://phet.colorado.edu/en/simulation/moving-man**](http://phet.colorado.edu/en/simulation/moving-man) |
| 5 | Skate park physics: kinetic, potential, friction, conservation of energy | [**http://phet.colorado.edu/en/simulation/energy-skate-park**](http://phet.colorado.edu/en/simulation/energy-skate-park) |
| 5 | 1d and 2d collisions of objects | [**http://phet.colorado.edu/en/simulation/collision-lab**](http://phet.colorado.edu/en/simulation/collision-lab) |
| 5 | Build a solar system to look at gravity | [**http://phet.colorado.edu/en/simulation/my-solar-system**](http://phet.colorado.edu/en/simulation/my-solar-system) |
| 5 | Friction interactions | [**http://phet.colorado.edu/en/simulation/friction**](http://phet.colorado.edu/en/simulation/friction) |
| 5 | Forces and interactions | [**http://phet.colorado.edu/en/simulation/forces-1d**](http://phet.colorado.edu/en/simulation/forces-1d) |
| 5 | Gravity interactions of objects | [**http://phet.colorado.edu/en/simulation/gravity-force-lab**](http://phet.colorado.edu/en/simulation/gravity-force-lab) |
| 5 | Forces on objects on a ramp | [**http://phet.colorado.edu/en/simulation/the-ramp**](http://phet.colorado.edu/en/simulation/the-ramp) |

**Video Clips and Songs**

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| **Unit** | **Description/Title** | **Link** |
| 5 | Energy | <http://www.cleanvideosearch.com/media/action/yt/watch?v=JXGnfs72Eck> |
| 5 | Changes in Energy | <http://www.cleanvideosearch.com/media/action/yt/watch?v=RD_54Cq_UMM> |
| 5 | Acceleration | <http://www.physicsclassroom.com/mmedia/kinema/avd.cfm> |
| 5 | Eureka! Inertia | <https://www.youtube.com/watch?v=VrWgDnkIjE8&index=1&list=PL07249EFA9038FDC1> |
| 5 | Eureka! Speed | <https://www.youtube.com/watch?v=LMsyYyrS3Bc&index=3&list=PL07249EFA9038FDC1> |
| 5 | Eureka! Gravity | <https://www.youtube.com/watch?v=W4Oq3SiVSR4&index=4&list=PL07249EFA9038FDC1> |
| 5 | Eureka! Weight vs. Mass | <https://www.youtube.com/watch?v=zSJ-VCZ2ba0&index=5&list=PL07249EFA9038FDC1> |
| 5 | Eureka! Kinetic Energy | <https://www.youtube.com/watch?v=39gaTGXOwM&index=6&list=PL07249EFA9038FDC1> |
| 5 | Eureka! Potential Energy | <https://www.youtube.com/watch?v=EM7FjGzUCR4&index=7&list=PL07249EFA9038FDC1> |

**Video Based Projects found below:**

**Video Based Projects found at the Think Central Site**

Unit 1: (Grade 6) Invaders in the Everglades

Unit 3: (Grade 7) Just Add Heat

Unit 4: (Grade 6) Tornado Warning

Unit 5: (Grade 6) Animals in Motion (Physics)

Unit 5: (Grade 6) Take the Long Way

 (\*Mozilla/Firefox or Chrome suggested browsers)

**Directions to access Video-Based Projects**:

*From Science Fusion disk*: select Video Based Projects 🡪 select Video Wrapper (unblock blocked content, if applicable) 🡪 select Grade 6, then teacher/student resources.

*From thinkcentral.com*: from Dashboard, select Resources 🡪 select Science Fusion Video Based Projects G6 🡪 Select Grade 6 or Grade 7, depending on which title.

**Directions to access CPALMS resources/lesson plans according to Florida Benchmarks**

[www.cpalms.org](http://www.cpalms.org) 🡪 free sign-up or sign in 🡪 search by Standard or Resource option: (lesson plan, animation, game, webquest, student activity, formative assessment, etc.)