

When's the Last Time Your Family Had Fun Learning Science?

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Why study science? Obedience



- Fulfill the Creation Mandate- Gen 1:28
- Science is a way to develop a knowledge of God
 - Psalm 19:1
 - Romans 1:20
 - Jer. 9:23
 - Ps. 36:5-10
- Science is a way to love our fellow man- medicine, saving lives, better way of living.
- Science is an avenue to develop a Christian worldview in your students-
2 Cor. 5:7
Hebrews 11:3- we operate in faith- view the world through biblical lens
- Encourage Christian Growth through...
 - Critical thinking
 - Self discipline
 - Titus 1:9-11
- Promote scientific literacy.
 - Scientific knowledge- facts, concepts, principles-
 - Enjoying and appreciating the product of science
 - Scientific attitudes- learning, surroundings, careers
 - See science as a part of everyday life.
 - Scientific skills- investigation- thinking, drawing conclusions, incorporating process skills as part of learning- observing, measuring, classifying, interpreting, recording, predicting, experimenting, communicating

“A scientifically literate person uses scientific knowledge, skills, and attitudes to identify and solve science-related problems.”

Get excited about teaching science!


- Regain a sense of wonder and the joy of learning. Ps. 19:1-3

Marie Curie: "I am among those who think that science has great beauty. A scientist in his laboratory is not only a technician: he is also a child placed before natural phenomena which impress him like a fairy tale.

- Read science periodicals
 - Visit scientific websites
 - Participate in blogs and forums (creation geology website)
 - Network with other teachers and professionals
 - Attend conferences (intelligent design conference, NSTA , International Conference of Creationism, Christian school conventions)
- Develop a vision.
 - Renew the mind in science-See God through science- Faithful Creator Who deserves my worship (sovereign, protection, faithfulness)
 - Understand science - The collection of observations, inferences, and models produced through a systematic study of nature for the purpose of enabling humans to exercise good and wise dominion over God's world.
 - Use science properly- how things work- not trying to establish truth, but finding excitement in seeing the truth of His Word- which has the answers.
 - Reclaim science for God's glory- "The earth is the Lord's and the fullness thereof, the world, and they that dwell therein."

Getting students excited

- Communicate your wonder, enthusiasm, and vision
 - Use vibrant and meaningful biblical integration
 - Read thought provoking articles and books- Dawkins- *The God Delusion*, Collins- *The Language of God*, Morris and Petcher- *Science and Grace*.
 - Ask probing questions: What is a biblical explanation for mountains, glaciers, fossils, etc.?
 - Involve students- adopt a highway, recycle, animal rescue, environmental issues.
 - Make use of discussions, ethics of a manned mission to Mars, evolutions, stem cell research, abortion, intelligent design
- Create and inspirational environment
 - Do interesting, practical bulletin boards: Christmas lights and constellations, diagrams of animals, planets, post articles, maps.
 - Have animals in your room (even as visitors).
 - Make a discovery center- tuning forks, rock collections, insects, magnets, plants, books and periodicals, magnifying glass, microscopes, batteries, and circuits.

- Have posters, models, telescopes, computer, and mini-weather station in your room.
 - Make a place for plant or crystal growing observations.
 - Cook!
- Make your class unforgettable.
 - Use technology
 - Use pictures- free on internet
 - Video and audio
 - Do demonstrations
 - Use attention getting stories or pose questions
 - Have guest speakers- meteorologists, other teachers, geologists, chemists, engineers, physicists, biologists, zoologists)
 - Take field trips
 - Feature scientific careers
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- Do hands-on activities
 - Build models: rockets, bridges, solar powered cars
 - Lab exercises: Chemistry and physics experiments
 - Interactive animations: get online
 - Virtual lab activities
 - Do inquiry exercises
 - Field work, problem solving
 - Projects- science fair, rock and insect collections, leaf collections, constellations, research
 - Extra credit opportunities

Websites

Hands on activities in general

http://www.windows.ucar.edu/tour/link=/teacher_resources/activity.html

<http://www.exploratorium.edu/explore/handson.html>

<http://education.jlab.org/indexpages/activity6.php>

http://www.surfnetkids.com/science_experiments.htm

<http://pbskids.org/zoom/activities/sci/>

http://edtech.kennesaw.edu/jcheek1/life_activities.htm

http://www.doscience.com/act_archive/index.html

http://www.eduplace.com/science/bestofthenet/life_sciences.html

<http://kids.nationalgeographic.com/kids/>

<http://www.superchargedscience.com/>

Kitchen chemistry

<http://homeschooling.gomilpitas.com/explore/kitchenchemistry.pdf>

Science vocabulary hangman

<http://education.jlab.org/vocabhangman/index.html>

Random activities

<http://faculty.washington.edu/chudler/experi.html>

Interactive computer games

<http://www.apples4theteacher.com/science.html>

Current events

http://www.windows.ucar.edu/tour/link=/teacher_resources/current_event_edu.html

Mapping

http://www.windows.ucar.edu/tour/link=/teacher_resources/teach_makemap.html

Experiments

<http://www.madsci.org/experiments/>

Sunkist fruit experiments

<http://www.sunkist.com/kids/experiments/>

Rocks and minerals

Sedimentary snack activity

<http://library.thinkquest.org/J002289/snacks.html>

Growing crystals activity

<http://library.thinkquest.org/J002289/crystals.html>

Rock model activity

<http://library.thinkquest.org/J002289/models.html>

Rock literature activity

<http://library.thinkquest.org/J002289/geode.html>

Rock cycle activity

<http://library.thinkquest.org/J002289/rcycleact.html>

<http://beyondpenguins.nsd.org/issue/column.php?date=September2008&departmentid=literacy&columnid=literacy!lessons>

Rocks and minerals lessons and websites

<http://arthur.k12.il.us/arthurgs/rockle.htm>

<http://www.proteacher.com/110073.shtml>

<http://home.howstuffworks.com/rock-and-mineral-activities-for-kids.htm>

<http://www.emints.org/ethemes/resources/S00000504.shtml>

<http://edtech.kennesaw.edu/web/rocks.html>

Earth science report

http://www.windows.ucar.edu/tour/link=/teacher_resources/scientist_proj_edu.html

Graham cracker earthquake

<http://www.madsci.org/experiments/archive/1117652897.Es.html>

Cookie mapping

http://www.windows.ucar.edu/tour/link=/teacher_resources/teach_cookiemap.html

make a compass

<http://www.madsci.org/experiments/archive/860218908.Es.html>



Senses

Snapshot exercise and worksheet

http://www.windows.ucar.edu/tour/link=/teacher_resources/snapshot_edu.html

Senses

<http://school.discoveryeducation.com/lessonplans/programs/humanbody/>

smell

<http://faculty.washington.edu/chudler/chsmell.html>

Sight

blind spot activity

<http://faculty.washington.edu/chudler/chvision.html>

blind spot testers

<http://faculty.washington.edu/chudler/pdf/bspots.pdf>

Lesson plans websites

<http://www.lessonplanet.com>

<http://coreknowledge.org/CK/resrcs/lessons/3.htm>

http://www.teach-nology.com/teachers/lesson_plans/science/

Hearing activities

<http://faculty.washington.edu/chudler/chhearing.html>

<http://www.listentoyourbuds.org/educators.php?id=10>

Ear shape/hearing

http://www.teachersdomain.org/resource/tdc02.sci.life.colt.lp_earshape/

Ear lesson plan

http://www.lessonplanet.com/search?grade=all&keywords=ear&rating=3&search_type=related

<http://faculty.washington.edu/chudler/bigear.html>

<http://faculty.washington.edu/chudler/chhearing.html>

<http://42explore.com/rocks.htm>

Weather activities

<http://eo.ucar.edu/webweather/activities.html>

Report and predict the weather computer activity

<http://www.edheads.org/activities/weather/>

Clouds- including pics and powerpoint

http://www.windows.ucar.edu/tour/link=/teacher_resources/teach_cloudart.html

Cloud in a bottle

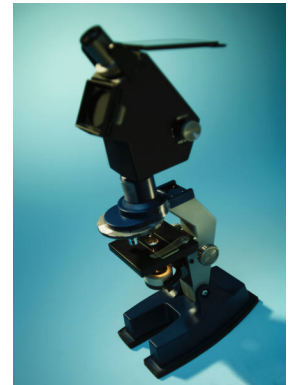
http://www.windows.ucar.edu/tour/link=/teacher_resources/teach_cloudbottle.html

Tornado

http://www.windows.ucar.edu/tour/link=/teacher_resources/tornado_edu.html

Poetry exercise on earth and clouds

http://www.windows.ucar.edu/teacher_resources/checkers_20march.pdf



Rice Krispies static

<http://www.madsci.org/experiments/archive/857359255.Ph.html>

Speed of light marshmallow activity

<http://www.physics.umd.edu/ripe/icpe/newsletters/n34/marshmal.htm>

Cell activity

<http://www.fi.edu/tfi/activity/bio/bio-3.html>

Heart

<http://www.fi.edu/tfi/activity/bio/bio-5.html>

Skin

<http://www.mcrel.org/whelmers/whelm25.asp>

<http://faculty.washington.edu/chudler/chtouch.html>

Plants

<http://www.fi.edu/tfi/units/life/living/livact2.html>

Online plant tutorial and quiz

<http://urbanext.illinois.edu/gpe/index.html>

Insects

<http://insected.arl.arizona.edu/uli.htm>

<http://www.insects.org/>

Turtles

<http://octopus.gma.org/turtles/index.html>

San Diego Zoo- recipes, crafts, and activities

<http://sandiegozoo.org/kids/>

Whale lifecycle checkers

http://www.windows.ucar.edu/teacher_resources/checkers_20march.pdf

Solar system

http://www.windows.ucar.edu/tour/link=/teacher_resources/teach_explanet_revised.html

Universe scavenger hunt

http://www.windows.ucar.edu/tour/link=/teacher_resources/scav_hunt_edu.html

