ECONOMICS ARKANSAS
Education for Real Life

Making the Economic Connection with Science

Economics is considered the "science of decision making." Just as Zoey used the scientific method to determine what would be the best food choice for the hungry dragon to satisfy his desire to not be hungry, economics uses methods to help students learn how to use scarce resources to satisfy individual wants.

Frank Einstein challenges readers to look at energy sources. Economics looks closely at natural resources and how they are used to produce goods and services we enjoy. Some of those resources are renewable meaning they can be replenished in a given period of time. Nonrenewable resources are very limited in supply.

Below are some activities and websites that help tie economics and science together:

K-2
LESSON PLANS:

- Bartering to Harmonize
  https://economicsarkansasorg.presencehost.net/file_download/inline/a29281b9-d71a-4499-b0ca-24ce8ba35872
- Curious George STEM
  https://aetn.pbslearningmedia.org/collection/curiousgeorge/
- Decisions! Decisions!
  https://economicsarkansasorg.presencehost.net/file_download/inline/f9d4f086-d61b-4622-a645-6ea1677ea7e5

ACTIVITIES:

- Energy coloring sheets

https://the-need-project.myshopify.com/products/energy-infobook-activities

- Energy Infobook http://the-need-project.myshopify.com/a/downloads/-/76bcdfe184e856dd/e64b3d3f49bdd284

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LESSON PLANS:

- Common Ground: The Water, Earth and Air We Share http://www.econed.org/wp-content/uploads/Common-Ground-FINAL.pdf
- Need Help as You Decide? Use the PACED Decision Making Guide! https://economicsarkansasorg.presencehost.net/file_download/inline/c9e54b09-67ac-408e-955b-16982ec5948a
- Case Study: The Case of the New Power Point (A PACED Decision Making Activity) http://www.econed-in.org/PDF/EEEPowerPlant.pdf

RENEWABLE AND NONRENEWABLE ENERGY:

Types of Energy (18 min. video)
https://www.youtube.com/watch?v=wMOpMka6PJI
Naturally Speaking Activity
https://www.teachengineering.org/lessons/view/cub_environ_lesson03

BIOMASS ENERGY:

- Types of Biomass Energy http://www.kids.esdb.bg/biomass.html
- Arkansas Corn and Energy https://www.arfb.com/uploads/pages/2016-_aitc_order_form_no_prices.pdf
- Energy for Kids: Biomass Energy https://www.ducksters.com/science/environment/biomass_energy.php
- Biomass: Energy Source Fact File! http://www.funkidslive.com/learn/energy-sources/biomass-energy-source-fact-file-2/#

COAL ENERGY:

- Coal Energy http://www.kids.esdb.bg/coal.html
- Coal Energy for Kids https://www.eia.gov/kids/energy.php?page=coal_home-basics
- Coal Facts http://www.scienceforkidsclub.com/coal.html

GEOTHERMAL ENERGY:

- Alliant Energy Kids: Geothermal Energy
  http://www.alliantenergykids.com/EnergyandTheEnvironment/RenewableEnergy/022401
- Geothermal Basics
  https://www.eia.gov/kids/energy.php?page=geothermal_home-basics

HYDROPOWER ENERGY:

- Hands-On Activity
  https://www.teachengineering.org/activities/view/cub_environ_lesson09_activity3
- Hydropower Energy
  https://www.studentenergy.org/topics/hydro-power

NATURAL GAS:

- Natural Gas Energy
  https://c03.apogee.net/contentplayer/?coursetype=kids&utilityid=pseg&id=16179
- The NEED Project
  http://www.need.org/Files/ESP/NatGasActivities.pdf

NUCLEAR ENERGY:

- Nuclear Energy Lesson Plan
  https://www.clarendonlearning.org/lesson-plans/nuclear-energy/
- Kid's Korner Energy Education is Fun!
  https://c03.apogee.net/contentplayer/?coursetype=kids&utilityid=pseg&id=16182
- Arkansas Nuclear Power Plant Spotlight, Russellville
  http://www.entergy-nuclear.com/plant_information/ano.aspx
- 5 Fast Facts about Nuclear Energy
  https://www.energy.gov/ne/articles/5-fast-facts-about-nuclear-energy

OIL ENERGY:

- Arkansas Museum of Natural Resources (Smackover)
  http://www.amnr.org/
- Fun Facts on Oil Energy
  http://www.fun-facts.org.uk/energy_facts/oil-energy.htm
- Oil Basics
  https://www.eia.gov/kids/energy.php?page=oil_home-basics
- Oil Facts for Kids
  http://www.scienceforkidsclub.com/oil.html

SOLAR ENERGY:

- Fun Teaching Strategies to Teach about Solar Energy
  http://www.teachhub.com/fun-teaching-strategies-educate-about-solar-energy
- Solar Education for Kids and Teens
  https://www.energymatters.com.au/education/solar-kids-teens/
- Solar Energy
  https://www.ducksters.com/science/environment/solar_power.php
- The Sun and Its Energy
  www.need.org/files/curriculum/guides/the%20sun%20and%20its%20energy.pdf

WIND ENERGY:

- History
  https://www.econedlink.org/wp-content/uploads/legacy/298_windgenerators.pdf
- How Wind Turbines Work
  https://www.saveonenergy.com/how-wind-turbines-work/
- Wind Energy in Arkansas
  https://windexchange.energy.gov/states/ar
- Wind Energy Activities
  http://stem-works.com/subjects/2-wind-energy/activities
- Producing Pinwheels to Model Wind Turbines
  http://kidsahead.com/subjects/2-wind-energy/activities
- Wind at a Glance Infographic
  http://www.need.org/Files/curriculum/Energy%20At%20A%20Glance/WindAtAGlance_11x17.pdf
- Wind Energy Lesson Plan
  http://tryengineering.org/sites/default/files/lessons/workingwithwind_0.pdf

GAMES:

- Energy Games and Icebreakers
  http://the-need-project.myshopify.com/a/downloads/-/a558350591fd0adb/20195250537b2055

SPOTLIGHTING SCIENTISTS AND INVENTORS:

Challenge students to select a scientist to research and then create a bio cube or print piece to show what they learned.

- Albert Einstein
  http://www.sciencekids.co.nz/sciencefacts/scientists/alberteinstein.html
- Nikola Tesla
  http://www.sciencekids.co.nz/sciencefacts/scientists/nikolatesla.html
- Sir Isaac Newton
  http://www.sciencekids.co.nz/sciencefacts/scientists/isaacnewton.html

- List of Famous Scientists and Inventors
  https://www.ducksters.com/biography/
- Famous Scientist Project
  https://sites.google.com/a/gapps.gjps.org/schartigerl/Home/famous-scientist-research-project
- Bio Cube
  http://www.readwritethink.org/classroom-resources/student-interactives/cube-30057.html
- Newspaper, Flyer or Poster
  http://www.readwritethink.org/classroom-resources/student-interactives/printing-press-30036.html