

SCIENCE LESSONS

Match science lessons with stories in your newspaper.

Storms

Collect newspaper stories about storms and their effects. These could include floods, high winds, tornadoes, hurricanes, and monsoons. How do the storms differ? What causes the storms?

Lightning

Read newspaper stories about damage caused by lightning. What can you do to be safe from lightning? Develop a list of DOs and DON'Ts for lightning safety.

Earthquakes, Volcanoes, Tidal Waves

Watch your newspaper for reports about earthquakes, volcanoes and tidal waves. Locate areas on a map. Keep a notebook of the scientific terms in the articles, such as seismograph, tremor, lava, fault, fissure or volcanic ash. To learn more about the words by using them as key words when you search Web pages and e-editions.

Prevailing Winds

Use the weather section in your newspaper for ten days to keep track of the direction of prevailing winds in your area. Notice which direction the wind is usually blowing when it rains in your area.

All about Weather

Using the daily weather map, discuss tides, phases of the moon, precipitation, sunrise and sunset and anything else of interest that your weather map offers.

Weather Calendar

Make a calendar and write or paste on symbols to denote the weather each day, such as raindrops or an umbrella for rain and the sun for a bright day. Read the newspaper for tomorrow weather forecast. Check to see if the forecast is accurate.

Effects of Weather

Use the weather section to spark curiosity in science. Nature sometimes presents dangers such as violent thunderstorms, tornadoes, drought and floods that can damage property and threaten people's safety. Look at the weather map in the

paper to see what weather different parts of the country and state are experiencing. Are there certain parts of the country or state that are more likely to experience hazardous weather? Do socio-economic factors such as lack of adequate housing or sanitation contribute to the problem and make life harder for those affected? Who helps people put their lives back together after a severe storm?

Climate Change

Collect scientific research on the question of climate change and global warming. Record and rate the source of any information that you find.

Oceans and Sea Creatures

What's happening that affects the health of oceans? What's happening that affects the health of sea turtles and other sea life? Where and how do you find information most relevant to your community? How does protecting oceans and sea life affect recreation, parks or roadways and/or development? What public policies would you support? Why?

Scientific Phenomena

Collect photos of various scientific phenomena. Cut and label: a lake, an ocean, a volcano, a mountain, a plateau, a river delta, a flood plain and other points of interest.

Science in Advertisements

Locate advertisements for cars, power tools, farm equipment, to promote a study of machines, sound, electricity, atomic energy and/or solar energy. Write a list of questions concerning an area. Compile scientific data from news items.

Disposable Report

Report on a local problem related to disposal of sewage, garbage, litter, industrial waste and/or other based on articles from your newspapers. Follow the topic and record possible solutions. Propose and defend a solution.

Disposable Problem

Follow any debate on how to collect and store waste in your community. Search newspaper archives for topics, such as landfills and waste management.

Pollution

Use newspaper stories to study pollution problems in your area. Classify what you learn under air, water, noise, trash or litter. What are the short- and long-term consequences of the pollution? What preventive or corrective methods might be taken to address the problem?

Sources of Energy

Study sources of energy as reported in stories from your newspaper. Examples might be oil, coal, natural gas, wood, propane gas, atomic energy, hydro or solar.

Beside each energy source, list its pluses (+) and minuses (-). Also identify the source of the information for what you list as a plus or minus.

Energy Sources

Classify sources of energy as renewable and non-renewable. What are the implications?

Wildlife

Look for articles in your newspaper about wildlife and wildlife conservation. The sports section often has wildlife stories related to hunting and fishing. Start a wildlife scrapbook with the stories you clip.

Creature Features

Cut out of newspapers every photo or drawing of an animal that you would like to have as a pet. You may also choose from pets identified in the Classifieds section under Pets for Sale. Animals suitable for pets are called "domestic" animals. Lions and tigers are not domestic animals.

Effects on Animals

Identify stories that show how human actions affect the health and welfare of animals. How do the effects on animals affect debate and passage of public policy?

Are any animals threatened? Are any threatened with extinction? Explain why and how.

Population

Identify stories that deal with increased development and growth in population (or decline) in your immediate community, the state, nation and/or world. How might

unchecked population growth affect your life, future citizens and/or people living in undeveloped countries.

Health

Collect and analyze stories and ads related to topics of alcohol, tobacco and/or drugs. What decisions did individuals make regarding the use of alcohol, tobacco and/or drugs that led to problems for themselves or others?

Better Health

Analyze stories for advice on diet, exercise and other measures that would improve health. What advice seems reliable and helpful?

Do any stories or ads refer to specific programs? What claims do they make? Do you agree with what the programs claim?

Careers in Science

Explore the types of science careers that are available in your community. Look through the classified advertising section of your local newspaper and, in particular, the technical careers section. Note the careers that are available in the science or technology fields. Discuss what the job involves, where those employed would work, why the work is important and whether or not you see yourself pursuing such a career and why or why not?

Learning about Careers in Science

Do you have a co-worker, family member, friend or neighbor who is a scientist and/or engineer? Interview them about their job. What led them to be interested in that career? What type of classes did they have to take while in school? What do they find to be the most interesting parts of their job? If possible, visit job sites and tour of the facilities.

Scientific Discovery

Often, scientific discovery builds on the past. Trace the development of a scientific discovery by reading an article on a scientific breakthrough and explain what had to happen before the latest breakthrough could occur. Or, find a tool, instrument, or an example of the latest technology in the newspaper. What discovery or invention came before the development of this tool? What do you they think may come next?

North Carolina Technology-Based Companies

North Carolina's home to fast-growing technology-based industries that include biotechnology, pharmaceutical and telecommunications companies. In your newspapers, find references to companies that fall in the categories. List the names of the companies and facts about the companies that explain their mission and purpose. Identify individuals in the stories whom you might call to find out more about the companies and available jobs.

Nations at War

Identify nations at war. To what extent do factors related to science contribute to war, its causes or effects? Consider limits of natural resources, climate, overpopulation, communications systems, weapons and other instruments of war.

Search for Science

Use newspaper archives on Web pages and in e-editions to search for words and concepts associated with science and share what you learn with other students and explain the relevance of science to your daily life.

On news sites, look for sections that rely heavily on science news and information. Also, identify any writers who cover science for your newspaper or columnists who write regularly about science and its implications.

Display science

Collect and classify stories and display them on bulletin boards, in scrapbooks or digitally, using school subjects, such as biology, chemistry, physics, astronomy, geology, meteorology, environmental science and/or other. What do you learn? What research remains to be done and questions need to be considered?

Source: Newspaper Association of America Foundation instructional guides

Prepared by Sandra Cook, NC Press Foundation, NIE