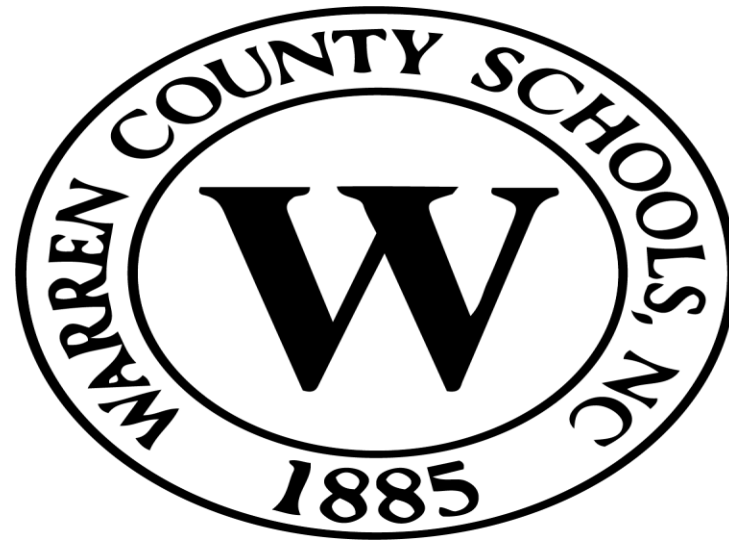


Warren County Pacing Guide



Second Grade Science

NC Standards	Vocabulary	Timeframe
<p style="text-align: center;">Unit of Study: Sound and Motion</p> <p>2.P.1 Understand the relationship between sound and vibrating objects.</p> <p>2.P.1.1 Illustrate how sound is produced by vibrating objects and columns of air.</p> <p>2.P.1.2 Summarize the relationship between sound and objects of the body that vibrate – eardrum and vocal cords.</p> <p>Essential Questions:</p> <p>What is sound? How is sound created?</p> <p>How do different organisms create and/or detect sound? In what special ways do humans detect sound?</p> <p>How is the creation of sound used by humans? How is the detection of sound used by humans?</p> <p>Annotated TEACHING Resources:</p> <p>Making a Xylophone http://learningideasgradesk-8.blogspot.com/2011/02/make-percussion-instrument.html</p> <p>Make a Guitar http://learningideasgradesk-8.blogspot.com/2011/02/make-guitar.html</p> <p>Animal Sounds http://www.tlsbooks.com/soundsthatanimalsmake.pdf</p> <p>The Science of Sound for Kids http://www.sciencekids.co.nz/sound.html</p> <p>Explore the subject of music and sound for kids with a range of experiments, games, projects and videos.</p> <p>BioMusic http://www.learnnc.org/lp/editions/biomusic/cover</p> <p>Biomusicology is the exciting area in science where music intertwines with biology. Your students will be fascinated by these lessons that cover the miracles of animal communication, the mechanics of sound, and their connections to the field of music. Two units of instruction are included.</p> <p>Wild Music http://www.wildmusic.org/</p>	<p>volume</p> <p>pitch</p> <p>tension</p> <p>vibration</p> <p>sound</p> <p>sound source</p> <p>sound receiver</p> <p>voice</p> <p>vocal cords</p> <p>ear</p> <p>ear drum</p> <p>instrument</p> <p>echo</p> <p>echolocation</p>	<p>8/17-</p> <p>10/6/2020</p>

Experience the sounds and songs of life on Earth at this online website that accompanies a traveling installation.

Sound Vibrations

http://www.pbslearningmedia.org/resource/phy03.sci.phys.howmove.lp_sound/sound-vibrations/

This lesson is designed to help students understand that vibrations are responsible for the sounds we hear. Additionally, they learn that sound vibrations can travel through different mediums.

Waves: Light and Sound Primary unit

<http://www.alvordschools.org/cms/lib8/CA01900929/Centricity/Domain/2616/1st%20Grade%20Teachers%20Guide%20Complete.pdf>

A unit encompassing both light and sound, teachers may find the lessons focused on sound useful.

Explore Sound

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

Explore this site to learn about acoustics and scientists who study sound.

Neo K-12 Sound

<http://www.neok12.com/Sound.htm>

A collection of short animations that explain sound and hearing.

Smart Exchange

<http://exchange.smarttech.com/search.html>

A directory of Smart Board lessons that teachers can download and use.

Teachers Domain

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

Free digital media for educational use.

Video Resources:

Brain Pop Sound

<https://jr.brainpop.com/science/energy/sound/preview.weml>

<https://educators.brainpop.com/lesson-plan/sound-background-information-for-teachers-and-parents/>

<https://educators.brainpop.com/lesson-plan/sound-activities-for-kids/?bp-jr-topic=sound>

Bill Nye Sound

Interactivities

<http://www.2learn.ca/kids/listSciG3.aspx?Type=44>

Text Resources:

<http://quatr.us/physics/sound/>

<http://www.dkfindout.com/us/science/sound/how-are-sounds-created/>

http://www.bbc.co.uk/bitesize/ks2/science/physical_processes/sound/read/1/

<http://www.readworks.org/passages/how-see-sound>

http://www.daviddarling.info/childrens_encyclopedia/sound_Chapter1.html

<http://www.scienceforkidsclub.com/sound.html>

Writing Prompts:

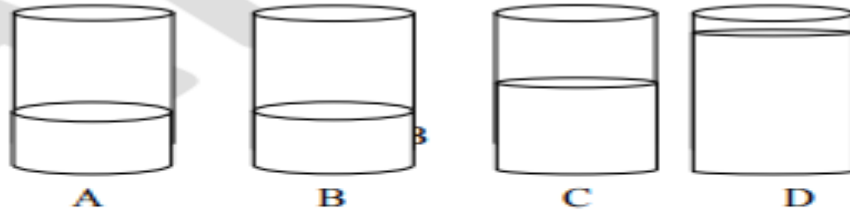
1. Create a pamphlet explaining the importance of protecting your hearing. Include at least 3 specific strategies people can use to preserve and protect their hearing.
2. Sound travels from place to place. Tell about some materials that sound travels through.
3. Select a musical instrument to research and write a report about it.
4. Write a poem that focuses on the sounds you hear outside in the Fall (Autumn) season.
5. Write a paragraph describing the sounds you hear when you step outside your front door.

Assessment Prototypes

2. P.1.1 Guide students to investigate sound by creating and playing various types of string and water bottle instruments. Elicit student explanations for why different instruments (strings, bottles) produce different sounds.



These glasses each have water in them. If you tap each one with a spoon which glass will have the highest pitch? Explain your choice.



(A) glass A
(B) glass B
(C) glass D

2.P.1.2 People make sound using their vocal cords. To make sound, our vocal cords must _____ . Explain your answer.

- (A) jump
- (B) vibrate
- (C) be still

Unit of Study: Matter, Properties and Change

2.P.2 Understand properties of solids and liquids and the changes they undergo.

2.P.2.1 Give examples of matter that change from a solid to a liquid and from a liquid to a solid by heating and cooling.

2.P.2.2 Compare the amount (volume and weight) of water in a container before and after freezing.

2.P.2.3 Compare what happens to water left in an open container over time as to water left in a closed container.

Essential Questions:

How can we describe matter?

What gives matter its unique qualities?

How do the properties of matter affect its behavior?

How can you describe a solid, or a liquid?

What properties of solids and liquids make them different?

What makes matter change from a liquid to a solid? A solid to a liquid?

Does liquid have a shape?

properties
solid
liquid
mass
volume
phase
matter
physical
property
boil
freeze
melt
heat
mixture
thermometer
temperature

10/7-
12/2/2020

<p>Can a solid change its shape? How does temperature affect matter? Annotated TEACHING Resources: Rader's Chem4Kids http://www.chem4kids.com/files/matter_states.html Explains basic states and properties. This site goes well beyond what elementary students need to know, but it written in an accessible way and may be helpful in guiding students who are prepared for more advanced study. Solids Liquids and Gases http://www.wallingford.k12.ct.us/uploaded/Curriculum/SCIENCE_K-8/SCI_GRADE_1/Sci_gr_1_solids_liquids_gases_Kit_curr_doc.pdf In this unit, children are given the opportunity to observe, describe, and compare the three states of matter. Students will learn the properties that make solids, liquids, and gases unique as well as their commonalities through simple investigations. Students will also explore how matter can change through the application of energy by conducting simple experiments. Science Online: Matter http://classroom.jc-schools.net/sci-units/matter.htm A collection of lessons for different grade levels concerning matter, properties, and more. Click on 3rd grade link for Solids and Liquids. SuperSTAAR Teaching Resources http://superstaar.org/grade-2/physical-science/25-matter-and-energy/ Students classify matter based on physical properties. These lessons can be adapted to address the clarifying objectives. You Be the Chemist http://www.chemed.org/programs/activity-guides/ The activity guides on this site encompass students in grades K-8. There are some lessons here that might be good additions to a unit. Investigating Matter Through Inquiry www.inquiryinaction.org/pdf/InquiryinAction.pdf This is a collection of Inquiry activities focused on Matter topics spanning K-8. The activities in Inquiry in Action include many suggestions for questioning strategies. Each activity also includes experimental procedures with all the required materials, expected results, and</p>	<p>water scale</p>	
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assessment ideas. An activity sheet is included for each activity to help students plan their experiment, record their results, and draw conclusions.

Liquids and Solids Unit

http://81west.com/curriculum/Grade%202/Science2/liquids_and_solids.pdf

Structure and Properties of Matter Unit

<http://www.mccracken.kyschools.us/Downloads/2%20NGSS%20UNIT%20Matter.pdf>

Center for Learning in Action: 2nd Grade Matter

<http://learning-in-action.williams.edu/opportunities/elementary-outreach/science-lessons/1st-grade-science/>

Compton Primary unit

http://web.compton.k12.ca.us/pages/departments/curriculum/pdf/1stgradeunitachp1_2.pdf

Delaware Solids and Liquids

<http://www.doe.k12.de.us/cms/lib09/DE01922744/Centricity/Domain/195/Unit%20Templates/1%20Solids%20and%20Liquids%20Unit%20Template.pdf>

Two Teachers States of Matter

http://www.twoteachers.ca/mike/files/403_overview.pdf

BGRS Exploring Liquids

<http://engagingstudents.blackgold.ca/index.php/division-i/sci-d1/science-2/topic-a-exploring-liquids/>

Virtual Learning Commons

<http://vlc.ucdsb.ca/c.php?g=156634&p=1547272>

CPSD Liquids and Solids

http://www.cloverpark.k12.wa.us/Dept/TeachLearn/Curriculum/Science/G1_U2_WA_Physical%20%20Science%20Guide.pdf

CPSED Liquids and Solids

<http://cpsed.net/curriculum/science/cranston-science/cranston-science-gr1-q3-units-2012may24.pdf>

Where Tomorrow Begins Unit

<http://www.wheretomorrowbegins.org/climb/wp-content/uploads/2013/02/2P2-Physical-Science-Unit-Matter.pdf>

Beyond Penguins and Polar Bears K-2

<p>http://beyondpenguins.ehe.osu.edu/issue/water-ice-and-snow/water-ice-and-snow-unit-outlines#K2</p> <p>Video Resources: Bill Nye: Phases of Matter https://vimeo.com/124260338</p> <p>https://d2ct263enury6r.cloudfront.net/DvRFXPMudlcp5nWRhJiE5oQcToe4k9NsfVaaOYM RQOyCanm.pdf</p> <p>Text Resources: https://www.nyu.edu/pages/mathmol/textbook/whatismatter.html</p> <p>http://www.chem4kids.com/files/matter_states.html</p> <p>https://hhpsscience.wordpress.com/about/</p> <p>http://www.scholastic.com/teachers/activity/matter-9-studyjams-interactive-science-activities</p> <p>Assessment Prototypes</p> <p>2.P.2.1 Teacher demonstration. Students record observations of changes in matter when heated and cooled (in science journals). Examples: melt chocolate, butter, cheese, ice (solid to liquid), cook eggs (liquid to solid), make and refrigerate jello, freeze water, milk.</p> <p>2.P.2.2 Teacher guided investigation. Students measure and record their observations of water in a container (weight and volume) before and after freezing. Start with two identical containers containing identical amounts of water. Place lids on both, and freeze one. Students should examine the containers before and after freezing to determine correspondences between them.</p> <p>2.P.2.3 Teacher guided activity. Students compare what happens to water left in an open container over time to water left in a closed container over the same amount of time. They record results of the investigation in science journals and discuss reasons for the observable differences.</p>		
<p style="text-align: center;">Unit of Study: Earth Systems, Structures & Processes</p> <p>2.E.1 Understand patterns of weather and factors that affect weather.</p>	<p>2.E.1.1 summarize (P)</p>	<p>12/3/2020- 2/8/2021</p>

<p>2.E.1.1 Summarize how energy from the sun serves as a source of light that warms the land, air and water.</p> <p>2.E.1.2 Summarize weather conditions using qualitative and quantitative measures such as:</p> <ul style="list-style-type: none"> • Temperature • Wind direction • Wind speed • Precipitation <p>2.E.1.3 Compare weather patterns that occur over time and relate observable patterns to time of day and time of year.</p> <p>2.E.1.4 Recognize the tools that scientists use for observing, recording, and predicting weather changes from day to day and during the seasons.</p> <p>Essential Questions:</p> <p>How does the Sun affect the Earth?</p> <p>How can we measure and describe the weather?</p> <p>How can we compare weather conditions?</p> <p>What are some patterns we can observe involving weather conditions?</p> <p>What are some tools that are used to observe and measure weather conditions?</p> <p>Annotated TEACHING Resources:</p> <p>LEARN (teacher professional development)</p> <p>LEARN was created to increase teacher knowledge of and interest in the atmospheric sciences.</p> <p>http://www.ucar.edu/learn/index.htm</p> <p>NOAA Education - Primarily for Teachers</p> <p>Teachers can access a variety of materials for use in the classroom, or as background reference material. The materials are grouped according to topic: Weather, Climate change, Oceans, Satellites and space, and Training.</p> <p>http://www.noaa.gov/resource-collections/weather-atmosphere-education-resources</p> <p>The S'COOL Project</p> <p>The S'COOL Project involves students (ages 5-20+) in real science, making and reporting ground truth observations of clouds to assist in the validation of NASA's CERES satellite instruments.</p> <p>http://science-edu.larc.nasa.gov/SCOOL</p>	<p>energy light land air solar energy* 2.E.1.2 summarize (P) describe (P) measure (P)/collect (P) weather conditions qualitative measures quantitative measures -temperature -wind speed -precipitation -wind direction cardinal directions thermometer wind sock/wind vane anemometer rain gauge 2.E.1.3 compare (P) weather patterns -morning -afternoon -evening</p>	
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<p>Weather Unit grade 2 This unit integrates mathematics and science. https://www.sedl.org/scimath/pasopartners/pdfs/weather.pdf</p> <p>NCES 2nd grade LiveBinder A livebinder dedicated to grade 2 weather in the NCSCOS. http://www.livebinders.com/play/play?id=478298</p> <p>PBL Unit Weather Students build weather instruments, and use data sources to observe weather. http://www2.davidson.k12.nc.us/pbl/eett/pblfiles/varner/PBL-weather.pdf</p> <p>Chicago Science Companion Weather Sample Unit This weather unit concentrates on weather conditions, patterns, water, air and wind. Students observe and practice using weather instruments. http://www.sciencecompanion.com/wp-content/uploads/Weather-Digital-Sampler-WEB.pdf</p> <p>Weather Wiz Kids A website especially for kids to allow them to learn more about the fascinating world of weather. http://www.weatherwizkids.com/</p> <p>Beyond Penguins and Polar Bears This site features a variety of weather lesson activities for students in all grade spans. http://beyondpenguins.ehe.osu.edu/issue/weather-and-climate-from-home-to-the-poles/hands-on-science-and-literacy-lessons-about-weather-and-climate</p> <p>Evergreen Curriculum Weather Unit Grade 2 This unit outline is a Grade 2 unit developed around building knowledge about the weather and how the weather affects us. The Evergreen Curriculum outlines that Grade 2 students need to begin to understand how to observe weather, record weather information, that weather changes from day to day as well as throughout the seasons. https://kuzekc.files.wordpress.com/2010/03/weather-unit-outline.doc</p>	<ul style="list-style-type: none"> -seasonal 2.E.1.4 recognize (P) Scientists meteorologist* electronic weather instruments/to ols -collection of data -running record -sensors 	
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Weather – Everything You Need

Scholastic's meta site featuring all of their weather materials for all grade levels.
<http://www.scholastic.com/teachers/unit/weather-everything-you-need>

Center for Learning in Action

This 3rd grade weather unit has some lessons that might be useful in teaching grade 2 weather. See lessons 0, 4, 5, 7.
<http://learning-in-action.williams.edu/opportunities/elementary-outreach/science-lessons/3rd-grade-weather-unit/>

Utah Education Network

This site has several lessons that would be useful in the NCSCOS grade 2 Science.
<http://www.uen.org/core/displayLessonPlans.do?courseNumber=3020&standardId=38875&objectiveId=38883>

Calendar and weather book <http://www.uen.org/Lessonplan/preview?LPid=5721>

WGBH What's the Weather lesson

Weather is a part of everyday life and can affect little things such as your choice of clothes or activities. Weather can also be severe and affect your life in bigger ways, as seen in the damage done by a hurricane or tornado. Meteorologists study the components of weather—the conditions of the atmosphere such as temperature, precipitation, wind, and clouds—in an effort to predict the weather and help people be better prepared. In this lesson, students use daily observations, videos, and activities to learn about meteorology and the changing nature of weather.

http://www.pbslearningmedia.org/resource/ess05.sci.ess.watcyc.lp_whatweather/whats-the-weather/

Weather Theme Materials

Safety tips, coloring books, word searches and more can be found on this site.
<https://www.eduplace.com/monthlytheme/march/weather.html>

Weather PBS Unit

This long-term weather unit addresses second grade content standards for the topic "Weather." Students plan their own driving question (although they may be guided towards something similar to "How do we know what to wear to school tomorrow?"). Students digitally record a daily weather report that begins very simply with measuring temperature. However, the weather reports become longer and more detailed as students design and create their own weather instruments and decide more information that they would like to include in their report.

http://leaders.utoledo.edu/pbs_lessons/unit_plans/Bradley%20Unit.pdf

Grade 2 Weather Lessons

In the following interdisciplinary, inquiry outreach project, students will research weather-related science content and then write friendly letters to meteorologists across the country. In their correspondence, students will share their knowledge as well as request information about weather-related questions.

<https://sites.google.com/a/walthampublicschools.org/inquiry-based-science-lessons--elementary/grade-2/grade-2-weather>

Read, Write, Think

Weather: A Journey in Nonfiction This research project is designed for primary students to engage in nonfiction text, in both print and digital format. Students begin by formulating questions on a subject (in this case, weather), then classify questions into topic areas. After grouping students by topic areas and assigning a question previously generated, students engage in nonfiction text to answer the question. Combining question with answer, students construct sentences that are then combined with others in their topic group to form a "report" (paragraph length). The group then creates an illustration to reflect the topic and publishes it in the chosen format (print or digital).

<http://www.readwritethink.org/classroom-resources/lesson-plans/weather-journey-nonfiction-219.html>

Windows to the Universe

Click on the Atmosphere and Weather hyperlink to scroll to weather related projects and activities.

http://www.windows2universe.org/php/teacher_resources/activity.php#3

Video Resources:

PBS learning Systems Weather

http://unctv.pbslearningmedia.org/search/?q=Weather+videos&selected_facets=

Watch Know Learn

<http://www.watchknowlearn.org/SearchResults.aspx?SearchText=weather>

Text Resources:

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

<http://www.almanac4kids.com/index.php>

<http://www.spaceweathercenter.org/index.html>

<https://eo.ucar.edu/webweather/>

<http://www.usatoday.com/weather/>

http://www.bbc.co.uk/schools/whatisweather/aboutweather/flash_menu.shtml

Terminology:

<http://www.weatherwizkids.com/weather-words.htm>

<https://quizlet.com/91156116/weather-vocabulary-grade-2-flash-cards/>

Writing Prompts:

- 1) Use the interactive weather prompt generator to get a story starter:
http://writingfix.com/right_brain/Who_What_When_Where_Wild_Weather1.htm
- 2) How would the different seasons affect people in the following professions: firefighter, ice cream man, gardener, airplane pilot, ship captain?

3) A rain storm can happen during any of the seasons, but it can be a lot different depending on how cold it is out. How is a rain storm in the summer different from a rain storm in the winter? Go into detail and pull from your own experiences.

4) Of all the 12 months, which would you say is the one that you enjoy the most? Is it because of a particular season? A particular holiday? Give lots of reasons why and tell a little story about when it became your favorite month.

<http://www.scholastic.com/teachers/article/weather-words-and-what-they-mean-writing-prompt>

Assessment Prototype



2.E.1.1

Make a list that includes everything in this picture that is receiving energy from the sun. Explain how each thing is receiving energy.

2. E.1.2 Use a wind vane, sock, and anemometer to measure wind direction / speed and discuss findings.

2.E.1.2 Use a rain gauge to measure precipitation and discuss findings.

2.E.1.2 Measure temperature using manual as well as digital thermometers.



2.E.1.3

Above is a picture of a thermometer. Which season is most likely to have this thermometer reading? Why do you think so?

A. Winter B. Fall C. Summer

2.E.1.4



Circle the tool that is NOT used to observe, record, or predict weather.
Explain why you think so.

Unit of Study: Structures & Functions of Living Organisms

2.L.1 Understand animal life cycles.

2.L.1.1 Summarize the life cycle of animals:

- Birth.
- Developing into an adult
- Reproducing
- Aging and death

2.L.1.2 Compare life cycles of different animals such as, but not limited to, mealworms, ladybugs, crickets, guppies or frogs.

Essential and Guiding Questions:

What is a life cycle?

What are the stages of a life cycle?

How do life cycles of different animals compare?

How do adults help support the growth of younger animals?

Annotated TEACHING Resources:

NCES 2L1 Livebinder

A livebinder dedicated to sharing resources used to teach NCES 2L1

<http://www.livebinders.com/play/play?id=478526>

Students Butterfly Life Cycle

Despite their small size, butterflies and moths are some of the world's most wondrous animals. Their beauty, seemingly miraculous metamorphosis, and apparently carefree flight all spark our imaginations.

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

birth
adult
reproduce
age
death
lifecycle

2/9/2021-
4/7/2021

Video of monarch life cycle

<http://www.youtube.com/watch?v=Ry4hqn0WD60>

Video of ladybug life cycle

<http://www.youtube.com/watch?v=SvHWxDjFB8&feature=related>

Journey North Monarch Butterfly Migration Project

Report your sightings each fall and spring as the monarchs travel to and from Mexico. Track migration on real-time migration maps. Help scientists learn more about monarchs.

<http://www.learner.org/jnorth/monarch/index.html>

Observing the life cycle of a butterfly

This lesson is the first of two lessons that focus on butterflies and their habitats.

<http://sciencenetlinks.com/lessons/butterfly-1-observing-the-life-cycle-of-a-butterfly/>

Puppet Monarch Life cycle

This is a Puppeteer version of monarch life cycle. This video provides Arts integration opportunities.

<http://artsedge.kennedy-center.org/multimedia/VideoStories/hobey-ford/hobey-ford-butterfly.aspx>

Dancing the life cycle of the butterfly

In this lesson, students create their own original dance that communicates the stages of the life cycle of the monarch butterfly.

http://artsedge.kennedy-center.org/educators/lessons/grade-k-2/Butterfly_Dance.aspx#Instruction

Mealworms: facts & activities

It's common to present mealworms to children during elementary school as a way to teach ecology and ease them into life cycle lessons. They're inexpensive and easy to come by, which makes them an ideal classroom "pet" while mealworm lessons are ongoing.

http://www.ehow.com/info_8337774_mealworms-kids.html

Butterfly life cycle activities

A collection of butterfly construction activities including handprint and straw models, mobiles, puppets, and more.

<http://www.enchantedlearning.com/subjects/butterflies/activities/>

North American Butterfly Association

The official site of the NABA. Full of resources for monitoring, photo contests, and more.

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

Minnesota STEM Teacher Center

Students will observe and sequence that plants have a life cycle that includes sprouting; developing roots, stems, leaves, and flowers; reproducing; and eventually dying. *goes beyond the clarifying objectives, but very good resource for differentiating*

<http://www.scimathmn.org/stemtc/frameworks/2431-life-cycles>

Project Wild

This is a supplementary, interdisciplinary, instructional program focused on wildlife that is helpful for educators of students in kindergarten through high school

<http://www.projectwild.org/overview.htm>

Project learning Tree

An award-winning environmental education program designed for teachers and other educators, parents, and community leaders working with youth from preschool through grade 12.

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

N.C. Environmental Education

The N.C. Office of Environmental Education in the N.C. Department of Environment and Natural Resources was established to increase environmental literacy and natural resource stewardship in North Carolina by encouraging, promoting and supporting environmental education programs, facilities and resources throughout the state.

The office serves as North Carolina's clearinghouse, or central source, for all of the environmental education resources in the state.

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

Looking at life cycles

Students learn how to sequence the life cycle of a butterfly correctly.

<http://www.bbsrc.ac.uk/web/FILES/Resources/discovery6.pdf>

Dragonfly TV (video and lessons)

In this episode, Emily and Julie take a trip to the butterfly house at the North Carolina Museum of Life Sciences.

<http://pbskids.org/dragonflytv/show/butterflywings.html>

Creature Features (search by animal)

<http://kids.nationalgeographic.com/kids/animals/creaturefeature/monarch-butterflies/>

<http://kids.nationalgeographic.com/kids/animals/creaturefeature/ladybug/>

<http://kids.nationalgeographic.com/kids/animals/creaturefeature/red-eyed-tree-frogs/>

PBS Learning Media Life Cycles

Life cycles of frogs, dragonflies and butterflies. This is a video and lesson with card matching activity.

http://www.teachersdomain.org/resource/tdc02.sci.life.cyc.lp_lifecycle/

Emily's Life Cycles

A livebinder dedicated to teaching young students about life cycles.

<http://www.livebinders.com/play/play?id=1641233>

Life Cycle Online games

http://www.sheppardsoftware.com/scienceforkids/life_cycle/games.htm

Bill Nye Life Cycles

http://www.dailymotion.com/video/x3k1yza?GK_FACEBOOK_ OG_HTML5=1

Human Life Cycle game

<http://www.sciencekids.co.nz/gamesactivities/detectivescience/lifecycleofahuman.html>

Writing Prompts:

1. With guidance and support from adults, use a variety of digital tools to produce and publish writing – to illustrate the life cycle of a butterfly (or other selected organism)
2. Keep an observation log. Illustrate and record information about the organism you are observing.
3. Write an informative text, which explains the life cycle of an organism. Describe what happens at each stage.
4. Create an opinion piece: Write a description of the most beautiful butterfly you have ever seen.
5. Write an imaginary story about the day you turned into a butterfly.

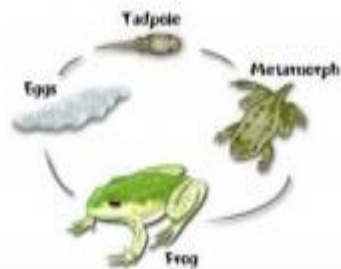
Assessment Prototypes

2.L.1.1 Guide students to create a picture book showing the life cycle of a human. Discuss the different stages shown in the life cycle. Explore and outline the main stages and processes in the life cycle.



2.L.1.2 After studying the life cycles of various organisms, have students tell how each life cycle is similar and different in the stages that are observed and the final organism that is produced.

After exploring and outlining the main processes of the life cycle in animals, ask students to draw and label a picture showing the life cycle of a frog.



Unit of Study: Evolution and Genetics

2.L.2 Remember that organisms differ from or are similar to their parents based on the

identify (P)
observe (P)
plants

4/8/2021-
6/3/2021

<p style="text-align: center;">characteristics of the organism.</p> <p>2.L.2.1 Identify ways in which many plants and animals closely resemble their parents in observed appearance and ways they are different.</p> <p>2.L.2.2 Recognize that there is variation among individual organisms of a particular kind within a population.</p> <p>Essential Questions:</p> <ul style="list-style-type: none"> • In what ways do offspring resemble their parents? ...in what ways do they differ? • Do offspring always resemble one another? <p>Annotated TEACHING Resources: NCES 2nd Grade Parents and Offspring http://www.livebinders.com/play/play?id=1641233</p> <p>NCES 2nd Grade Science Livebinder http://www.livebinders.com/play/play?id=478563</p> <p>Organisms and offspring unit This unit was authored by a team of educators. The template provided one example of unit design that enabled teacher-authors to organize possible learning experiences, resources, differentiation, and assessments. The unit is intended to support teachers, schools, and districts as they make their own local decisions around the best instructional plans and practices for all students. https://www.cde.state.co.us/standardsandinstruction/sc1-organismsandoffspring-pdf</p> <p>Cscope Investigating Animals unit Students will observe and explore ways that young animals often resemble their parents through coloration, body structure, and behavior. http://www.bigspringisd.net/Uploads/177/misc/f266812.pdf</p> <p>Parents and offspring unit How are plants and animals like their parents? Powerpoint in pdf. http://web.compton.k12.ca.us/pages/departments/curriculum/pdf/2ndgradesciunitb.pdf</p> <p>Are You my Parents? Unit These lesson activities allow students to explore the life cycles of various animals and how the offspring resemble their parents and each other. They include the investigation of</p>	<p>animals resemble parents appearance needs life processes interactions environment unique 2.L.2.2 recognize (P) variation individuals related organisms characteristics</p>	
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traits, both physical and behavioral, that affect an organism's ability to survive and reproduce.

<http://www.ccssoh.us/Downloads/3LS123C%20AreYouMyParents3.pdf>

Video Resources:

Baby animal songs <https://www.youtube.com/watch?v=cJg4YFtvOp8>

<https://www.youtube.com/watch?v=ZPzRyto8ryU>

Text Resources:

<https://www.lernerbooks.com/SiteCollectionDocuments/TeachingGuides/9780822556589.pdf>

Pictures:

https://www.google.com/search?q=parents+and+offspring+word+walls&biw=1390&bih=1105&source=Inms&tbn=isch&sa=X&ved=0ahUKewiT9Jn9t7nOAhVFyyYKHTltCQMQ_AUIBigB&dpr=0.8#tbn=isch&q=animal+parents+and+babies

<http://www.boredpanda.com/cute-animal-parenting/>

Writing Prompts:

1. Imagine that you have an identical twin. What would be some advantages and disadvantages of having an identical twin?
2. Look at a series of family pictures with parents and children. Describe how the children are similar to their parents and similar to one another.
3. Create a picture book that includes the names of animal parents and their offspring.
4. Investigate a species of bird. Write a summary of how this bird and their offspring are similar and different as the baby bird grows and develops.
5. Write an essay about two very different types of dogs. Explain how they can both be dogs, yet still be very, very different.

Assessment prototype

2.L.2.1 Guide students to observe pictures of plants and animals with potential and actual offspring. Ask students to identify ways in which many

plants and animals closely resemble their parents in observed appearance and ways they are different.

2.L.2.2 Guide students to observe pictures of various cats to include solids, tabbies, tigers, short hairs, longhairs, etc., and identify ways in which two or more are alike and different.

Guide students to create picture books of immediate and extended family members, noting the variation between related individuals.

