DELAWARE VALLEY SCHOOL DISTRICT

PLANNED INSTRUCTION

A PLANNED COURSE FOR:

Science

_____

Grade Level: 3

Date of Board Approval: _____2019_____

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Planned Instruction

Title of Planned Instruction:

Subject Area: 3rd Grade Science Grade(s): 3

Overview: Third grade science is a hands on, interactive based learning class period. Students will work to complete experiments, observe the scientific process, record understanding, analyze data, and use knowledge that has been gained to infer meaning. The project based interaction incorporates a variety of reading for understanding to ensure meaning in text, as well as mathematical measurement, problem solving, and peer collaborative skills. Students will focus on an expanded selection of Nature of Science, Biological Science, Physical Science, Earth and Space Science, and Technology and Engineering Education. Students will be ready with a foundation for advanced future courses.

Time/Credit for the Course: 180 days

Curriculum Writing Committee:

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Curriculum Plan

Unit 1 : Structures of Life- Combines Nature, Life Science, and Biology

Marking Periods: 1 and 2 (90 Days)

Standards: PA Academic Standards: www.ped.sas.org

Overview: The unit consists of four investigations with observable characteristics of organisms. Students will be able to observe, compare, categorize, and care for a selection of organisms. They will learn to identify properties of plants and animals, their adaptations, group organisms, and investigate structural growth and survival.

Students Focus:

- **seed development**
- **types of seeds for different types of fruits**
- **recognize seeds as an organism**
- **identify changes in the seeds as it grows**
- **seeds grow into new plants - reproduction process**
- **seeds are helped in the germination process by animals, weather, and water**
- **describe the structure and function of the parts of a plant**
- **inherited traits from parent plants get passed to new plants**
- **observe environments of living things and determine their needs for adaptation**
- **relate survival skills as a behavior**
- **identify different types of ecosystems**
- **create habitats within an ecosystem**
- **what plants and animals survive each ecosystem**
- **describe how plants and animals adapt to ecosystems**
- **explain what happens when parts of the ecosystem are removed**
- **identify the structures and functions of the human body**
- **changing and adapting features of the human body**
- **identify the three functions of the human skeleton**
- **explain how the human skeleton is compared to other structures in plants and animals**
- **physical movements work in conjunction with multiple structures**

**Unit 1 takes up 2 consecutive marking periods, but it may be moved around in the school year. For instance it can be taught during marking periods 2 and 3, or 3 and 4.*

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Due to the fact that seeds are to be sprouted to observe the growth process, the start of the unit can be altered to fit classroom needs.

Goal #1: Describe that organisms are made of cells and can be characterized by common aspects of their structure and functioning.

Objectives:

-Identify and describe the similarities and differences of living things and their life processes.

-Identify and describe the functions of basic plants.

-Classify living things based on their similarities and differences.

Core Activities:

- **Investigation 1 - Origin of Seeds**
  - Part 1: (FOSS) Seed Search - Students will hunt for seeds, delving into fruits. Students will open a fruit, locate seeds, describe seed properties, and count or estimate the number of seeds in the fruit.
  - Part 3: (FOSS) Seed Soak - Students will compare the mass of seeds that have been soaked in water overnight to the mass of dry seeds. They determine how much water the seeds soaked up.

Assessments:

- Science notebook/journals (Formative)
- Seed Sorts and Graphs (Summative)
- Seed diagrams (Summative)
- FOSS I-Check (Summative)

Correctives:

-Allow students to make their own drawings of seeds, adding labels and descriptions of the parts in their own words.

-Allow students to use sentence frames to express big ideas of each activity in their science notebooks.

Extensions:

-Allow students to research how old seeds can become and still germinate.

-Allow students to grow two types of seeds to observe and compare and contrast.

Goal #2: Describe that reproduction is essential to the continued existence of every kind of organism. Plants have unique and diverse life cycles that include birth, growth, reproduction, and death.

Objectives:

-Describe the basic needs of plants and their dependence on light, food, air, water, and shelter.

-Describe how plants and animals go through life cycles.

Core Activities:

- **Investigation 2 - Growing Further**

- Part 1: (FOSS) Germination and Growth: Students will compare four seeds germinating in mini sprouters. They identify and describe emerging plant structures such as seed coats, cotyledons, stems, leaves, and roots. Students discuss germination strategies used by different plants and how those strategies enhance the plants' chances of survival.
- Part 2: (FOSS) Plant Life Cycles: Students will grow seedlings hydroponically in nutrient solution and observe them throughout the life cycle. Students will observe and record the emergence of flowers, fruit, and new seeds. Students will sequence illustrations that show different stages in the life cycle of the plant. Students will read about and compare life cycles in plants and animals.

Assessments:

-Plant Parts Activity -Gynzy (Formative)
-Science notebook/journal (Formative)
-Plant growth charts (Summative)
-Plant life cycle diagrams (Summative)
-FOSS I-Check (Summative)

Correctives:

-Allow students to create 3D models of a plant life cycle and describe to a partner.

Extensions:

-Allow students to find and bring in samples of male and female cones. Have them pull out some of the scales in the female cones and locate the two seeds at the base of each cone scale.
-Allow students to write a story about a plant reproducing. Have them use vocabulary terms from the lesson in their story.

Goal #3: Identify and describe characteristics of plants and animals that help with their survival.

-Describe that plants and animals closely resemble their parents.
-Identify characteristics that appear in both parents and offspring.
-Identify adaptations of plants and animals that have helped them survive.
-Identify and describe plant and animal characteristics that are necessary for survival.

Core Activities:

- Plants: Heredity (A Closer Look - Chapter 2) - Students will identify inherited traits in humans by using family photos. Students will apply concept to plants.
- Plants: Variation of Traits (Generation Genius) - Students will write a comparison and contrast paragraph that shows the link between observed similarities and differences between dogs and their puppies, using photos. Students will complete a Venn Diagram to show the comparisons and contrasts of plants and their parent plants.
- Plants: Structure of Living Things (Generation Genius) - Students will recognize that all plants and animals have different structures that allow them to survive. Students will choose a plant and study its structure to identify its unique traits.

- Plants: Adaptations (A Closer Look - Chapter 3) - Students will identify what adaptations help desert plants survive. Students will simulate plant adaptations by modeling an adaptation that helps a plant store water.

Assessments:

-Generation Genius Activities/Worksheets

-Science notebook/journal

- C**orrectives:**
- **Extensions:**

Goal #4: Describe and explain that frogs and other animals have observable structures that serve various functions in growth, survival, and reproduction.

Objectives:

-Observe frog life cycles and describe their functions in terms of growth, survival, and reproduction.

Core Activities:

- Frog Life Cycles: (Gynzy) - Students will study the life cycle of the frog through metamorphosis, and identify other metamorphic animals.
- Frog Life Cycles: A Closer Look - Chapter 2) -Students will identify different stages that animals go through in a life cycle. Students will compare the life cycles of different kinds of animals. Students may use pictures of family pets from different life stages and make and record observations.

Assessments:

-Frog Life Cycle diagrams - student generated

-Science notebook/journals

Correctives:

Extensions:

Goal #5: Describe that adaptations are structures and behaviors of an organism that help it survive and reproduce.

Objectives:

- Identify that animals survive through adaptations.
- Identify that many plants and animals can survive harsh environments because of seasonal behaviors.
- Describe animal characteristics that are necessary for survival.

Core Activities:

- **I**nvestigation 3 **-** Meet the Frog (Substituted for the crayfish)
  - Part 2: Adaptation (FOSS) - Students will study frog behavior and learn that their behaviors have survival value. Students will study environments and consider the particular adaptations that allow organisms to survive.

Assessment:

-Habitat Organism Cards

-Science notebook/journals
-Adaptation charts - student generated
-FOSS I-Check

Correctives:

--Allow students to choose an animal that they see in daily life. Have them describe one adaptation that enables the animal to survive.
-Allow students to research animals that use camouflage for protection. Ask them to create a poster showing multiple examples of animal camouflage.

Extensions:

-Reading Wonders Unit 3 Week 1 and Unit 4 Week 3

Goal #6: Explain that when the environment changes, some plants and animals survive and reproduce, others move to new locations, and some die. Describe organisms that are related in feeding relationships called food chains with plants, animals that eat those plants, and animals that eat those animals.

Objectives:

- Investigate food chain dynamics through a simulation.
- Identify what is needed to sustain a food chain.

Core Activities:

- Investigation 3 (FOSS)
  - Part 5: Food Chains: Students will go outdoors to investigate food chains by assuming the role of animals in a food chain. By changing the number in each population, students will try to achieve a sustainable food chain.
- Food Webs (Generation Genius) - Students will connect that the sun is the source of all food. Students will create food chains with construction paper and create food webs with classmates.
- Gynzy - Food Chains - Students will identify the flow of energy in a food chain, distinguish between a food chain and a food web, understand the role of organisms in a food chain/food web, and understand the important balance in a food chain/web.
- A Closer Look - Chapter 3 - Visuals - Students will identify and describe producers, consumers, and decomposers by looking at a pond food chain.

Assessments:

-Food chain activity (FOSS)
-Generation Genius Activity
-Science notebook/journal
-FOSS I-Check

Correctives:

Extensions:

Goal #7: Describe the types of ecosystems, and how changes in physical characteristics, temperature, availability of resources, some organisms survive, others move, and others may die.

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Objectives:

- Identify components of an ecosystem.
- Describe changes in natural or human-made systems and the possible effects on the environment.
- Describe what happens to animals when its' habitat is changed.
- Describe how changes in the environment can affect an ecosystem.
- Describe how human interactions with the environment impact an ecosystem.

Core Activities:

- **E**cosystems (Generation Genius) - Students will each be given a card and will need to find the other members of the group. Students will discuss and present the interactions between those connected organisms. Students will identify living and nonliving components of the ecosystem.

Assessments:

-Worksheets
-Science Notebook/Journal
-Terrarium projects

Goal #8: Describe the characteristics and functions of the skeletal system, joints, and skin.

- Study skeleton systems using bones, images, and models.
- List and describe the functions of the skeletal system.
- Simulate joint flexibility.
- Compare and contrast skin fingerprints.

Core Activities:

- **Investigation 4: Human Body (FOSS)**
  - Part 1: Counting Bones: Students will determine the structure and function of the skeletal system. Students will use visuals to section off parts of the body and estimate the amount of bones. Students and teacher will determine actual amount. Students will identify the three main purposes for the skeletal system. Students will reassemble a bone puzzle.
  - Part 3: Joints and Muscles: Students will identify three types of joints, and recreate them using rubber bands and dowels. Students will describe how joints change human movements.
  - Part 4: Fingerprints: Students will use pencils and tape to make prints of their skin texture and fingertips. They will classify their fingerprints into the three basic patterns, whorl, arch, and loop.

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Unit 2: Physical Science, Earth Science, The Nature of Science **Marking Period: 45 days**

Standards: PA Academic Standards www.ped.sas.org

Overview:
Using both Water and Measure Matter Modules from the Foss Science program.

Measurement, the process of quantifying observations, is one of the cornerstones of science. Measurement compares nature - the unknown - to a standard unit - the known. Through such comparison, the organization of the world becomes more comprehensive. The Measuring Matter Module has four investigations that introduce students to tools and procedures for making comparisons of matter in its common forms - solid, liquid, and gas. As an important material on earth water has many properties and interactions with humans. Changes and interactions with water is a daily occurrence that will be observed.

Goal Focus:

- **measure based on a unit**
- **identify the metric units in 10s**
- **use standard tools- meter, kilometer, millimeters, liters, millileters, grams, kilograms**
- **matter is a foundation that is measurable**
- **common matter exists in three phase- solids, liquids, and gases**
- **each state has specific characteristics- size, shape, texture, density, flow, balance**
- **gravity plays an important role in the phases**
- **how does gravity interact to change matter**
- **changes in matter are caused by different catalysts**
- **temperature is an important catalyst to the phases**
- **explain how temperature effects phases**
- **water makes up a large part of the world**
- **identify the water cycle**
- **what role does water play for the earth**
- **earth's materials are made up of different mixtures**
- **mixtures can change**
- **solutions are different than mixtures and are changed by a reaction**
- **that matter that changes phases can still be measured**

Goal #1: Identify appropriate instruments for a specific task.

- Identify appropriate tools or instruments for specific tasks, and describe the information they provide (e.g., measuring [length-ruler; mass-balance scale] and making observations [hand lenses-very small objects]).

Core Activities:

- **Investigation 1 - The First Straw**
  - Part 1: (FOSS) Measurement Reasoning: Students will be able to measure and estimate length using logical reasoning with a straw.
  - Part 2: (FOSS) The Standard Unit: Students will be able to measure using the metric system (e.g., centimeter, meter, kilometer).
- **Measurement: Gynzy**

Assessments:

-T-Chart (length/width comparison)
-Science notebook/entry
-Worksheets
-FOSS iCheck (only use questions covered in Part 1 and 2)

Extensions:

-Conversion Card Game: www.education.com/activity/article/lets-convert

Correctives:

-GO Math! Chapter 10- Measurement
-Levels interventions from Go Math series
-Use inch blocks to show consecutive measurement to the standard foot
- use ten - 1 inch blocks to show the relation to the meter
-visualize the standardized measurements using household items

Goal #2: Describe the observable physical properties of matter.

- Describe and classify matter in terms of its observable properties (e.g., weight, mass, shape, size, color, texture, state).
- Classify a substance as a solid, liquid, or gas.
- Recognize and identify how water goes through phase changes (e.g., evaporation, condensation, freezing, melting).
- Describe how the properties of matter can be changed (e.g., heating, cooling, physical weathering).

Core Activities: Measuring Matter Kit

- **Investigation 2- Fact of the Matter**
  - Part 1: (FOSS) States of Matter: Students will be able to identify the characteristics (properties and behaviors) that define a material as solid, liquid, or gas.
    - www.generationgenius.com/?share=2313B Solids, Liquids, and Gases
    - www.generationgenius.com/?share=65D47 Properties of Matter

- Part 2: (FOSS) A Matter of Volume: Students will learn the standard metric unit for measuring volume- liter (L) and practice measuring volumes with graduated cylinders and syringes.
- Part 3: (FOSS) Weighty Matters: Students use a balance and graduated mass pieces to weigh objects to determine their mass (e.g., grams, kilograms).

- **States of Matter (video): Gynzy**

Assessments:

-Sorting Activity (Solid, Liquid, Gas, Unsure)
-Science notebook/entry
-Worksheets
-Discussion Questions/Exit Ticket: Generation Genius

Extensions:

- Part 4: (FOSS) Soaking Sponges: Students will measure how much water a dry sponge can soak up.
  -Gynzy (Floating and Sinking Video)
- Part 5: (FOSS) Weighing Objects Outdoors: Students will compare the size and mass of objects found outdoors.

Correctives:

- **Conservation of Matter: Generation Genius**
  - www.generationgenius.com/?share=2E53B
  - use video and leveled resources

Goal #3: Identify basic weather conditions and how they measured.

- Describe how weather variables (e.g., temperature, wind speed, wind direction, and precipitation) are observed and measured.

Core Activities:

- **Investigation 2**
  - Part 1: (FOSS) Build a Thermometer: Students will build a thermometer and conduct investigations to find out what happens when the thermometer is placed first in hot water and then in cold water.

Assessments:

-Science notebook/entry
-Bottle and Pipe Systems (Explain observations)

Extensions:

https://pbs39.pbslearningmedia.org/resource/wnet08.math.measure.sys.wnettemp1/reading-a-thermometer/

-Grab and Go Game (GO Math): Temp Match

Correctives:

https://www.ixl.com/math/grade-3/read-a-thermometer
www.softschools.com/measurement/temperature/games/thermometer

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Goal #4: Describe the observable physical properties of matter.

- Recognize and identify how water goes through phase changes (e.g., evaporation, condensation, freezing, and melting).

Core Activities: Water Kit

- **Investigation 3- Water Vapor**
  - Part 1: (FOSS) Evaporation: Students will learn that things dry because of evaporation. Students will observe a demonstration where paper towels are soaker with equal amounts of water and then putting in cups on a balance.
  - Part 2: (FOSS) Evaporation Locations: Students will measure equal amounts of water into cups, place in different locations, and monitor temperatures for 4 days.
  - Part 3: (FOSS) Surface Area: Students will measure the amount of water remaining in each container to discover that the greater the surface area exposed to air, the greater the amount of evaporation.
  - Part 4: (FOSS) Condensation: Students will learn that water vapor in the air condenses into a liquid on cold surfaces. Students will set up cups of ice water and room-temperature water, and observe condensation on the ice-water cup.
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Assessments:

-Science notebook/ entry
-Condensation Observations
-FOSS icheck

Extensions:

https://www.generationgenius.com/videolessons/water-cycle-video-for-kids/

Correctives:

Water Cycle Song-(Animated)-YouTube
https://www.education.com/worksheet/article/water-cycle-coloring/?source=related_materials&order=1

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Unit 3: Earth and Space/ Technology and Engineering Education Time Range in Days: 45 days

Standard(s):
3.3 Earth and Space Sciences
3.3.A Earth Structure, Processes, and Cycles

Standards Addressed: www.ped.sas.org

3.3.3.A4: 3.3.3.A5: 3.3.3.A6: 3.3.3.A7:

Overview:
The dynamics of earth science include the studies of forces of nature that build up and wear down the Earth's surface. Dynamics include energy flow across the Earth's surface and its role in weather and climate. Space science is concerned with the origin and the evolution of the universe. The understanding of these concepts uses principles from physical sciences, geography, and mathematics.

Goal Focus:

- **Investigate the processes of physical and chemical weathering of rocks and minerals.**
- **Investigate the composition of soils from four different locations; observe and compare local soils.**
- **make observations and identify minerals in common rocks.**
- **interpret data from graphs to build explanations from evidence and make predictions of future events.**
- **energy and fuels are derived from natural resources and how that affects the environment.**
- **explore alternative sources of energy that use renewal resources.**
- **electricity and magnetism as related effects and engage in engineering design**
- **investigate how the amount of energy transfer changes when balls of different masses hit a stationary object**
- **Use weather instruments to measure temperature, atmospheric pressure, humidity, wind direction, and wind speed.**
- **Describe the atmosphere, using visual displays.**
- **Investigate the conditions that cause condensation and evaporation as part of the water cycle.**

- **Interpret the data displayed on weather maps and look for patterns over time**
- **Work with others as scientists and engineers to create conceptual and physical models to explain how something works.**
- **Plan designs, select materials, construct products, evaluate, and improve ideas to meet specific criteria.**

Goals #1: Describe various materials that make up the Earth.

Objectives:

- Recognize that rock is composed of different kinds of materials.
- Describe the composition of soil as weathered and decomposed organic material.

Core Activities:

1. Use "A Closer Look" Physical Science lesson 1

- introduce vocabulary mineral, rock, igneous rock, sediment, sedimentary rocks, metamorphic rock
- describe rocks using color, hardness, and shape- using rocks and minerals kits
- have students scratch rocks and minerals on a white tile and record the colors on a t-chart
- identify the streak, lust, and hardness
- complete questions about how the minerals break when scratched and their uses in foods, everyday life
- create a foldable or t-chart for types of rocks and uses

2. **Observe different types of soil- Lesson 2 "A Closer Look"**

- Gather soil samples from outside - topsoil
- students will look through soil to find tiny particles that make up soil
- identify rocks, plant matter, insects
- teacher resource - https://www.soils4teachers.org/soil-horizons
- discuss and label soil diagram
- identify important uses for soil
- reasons soil weathers- use generation genius lesson https://www.generationgenius.com/videolessons/weathering-and-erosion-video-for-kids/
- create notebook foldable or t-charts

Assessments:

- worksheet from generation genius

- notebook assessment
- Generation Genius test

Extensions:

- Use minerals to make toothpaste:
- https://www.earthsciweek.org/classroom-activities/a-paste-with-taste

Correctives:

- Video through generation genius
- Gynzy- hands on virtual diagram

Goals #2: Identify and describe the types of Earthś natural resources.

Objectives:

- Describe why certain resources are renewable and nonrenewable.
- Identify and describe examples of renewable and nonrenewable.
- (REVIEW) living things benefit from water and resources.

Core Activities:
LAB

- Introduce fossil fuels, discuss the renewable and nonrenewable
- DIscuss what makes a fossil (living things dying and turning into rock
- students will model a fossil using glue, a spoon, and an apple slice.
- place liquid glue on a spoon to mirror the effects of tree resin
- place the apple on the glue and have students let it dry
- compare the differences over time and explain the decomposition without the glue versus the preservation in the sticky resin

Use¨A Closer Look¨ lesson 3 to teach about fossils and describe fossil fuels

- replate fossils to the energy by burning fossil fuels
- Create a foldable or notebook chart that explains fossil fuels
- video from generation genius

Assessment:

- charts/notes
- https://www.generationgenius.com/videolessons/fossils-and-extinction-video-for-kids/ exit ticket
- quiz

Corrective:

- video- replay from generation genius
- games
- vocab card

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Goals #3: Identify and describe the ways that cause Earthś surface to be in a state of constant change and movement.

Objectives:

- Identify ways that cause Earthś surface to be in constant change (erosion, weathering, expansion)
- distinguish ways that tear down and build up the Earthś surface (erosion, weathering, volcanic activity, earthquakes).
- Distinguish slow and rapid changes to Earthś surface (RAPID: volcano, earthquakes SLOW: weathering, erosion)

Core Activities:

- The earth's surface gets broken down through weathering.
- Small pieces of the earth get moved through erosion.
- The small pieces are deposited somewhere else through a process called deposition.
- https://www.generationgenius.com/videolessons/weathering-and-erosion-video-for-kids/

Before Video

- What happens when something weathers over time?
- Does erosion mean?ANSWER
- Can you think of a type of weather that can change Earth's surface?ANSWER
- What might happen if water freezes in a container?ANSWER
- What happens when wind sweeps up sand and throws it against a big rock?ANSWER

After Video

- How did Split Apple Rock form in New Zealand?ANSWER
- How does a crack in the sidewalk form?ANSWER
- How did mushroom rocks form?ANSWER
- What are the four main ways weathering can happen?ANSWER
- Does weathering affect different materials differently?ANSWER
- Why does deposition occur after erosion?

Assessments:

- Notebook questions
- Exit tickets-generation genius

Correctives:
Video

Goal #4: Identify basic weather conditions and how they are measured.
Objectives:

- Recognize clouds have different characteristics related to weather conditions

- describe how weather variables are observed and measured
- identify appropriate instruments to study weather elements

Core Activities:
www.generationgenius.com/?share=199EF Weather vs. Climate

- Weather is the day-to-day variation of the atmosphere's condition locally.
- Climate is the year-by-year variation of the atmosphere's condition over a large area.
- Scientists record weather patterns across different times and areas to make predictions.

Assessment:

- Exit ticket
- Quiz

Goal #5: Observe and Identify changes in an object's motion.

Objectives:

- **Identify and describe an object's motion (e.g., start/stop, up/down, left/right, faster/slower, spinning).**
- **Describe an object's position in terms of its relationship to another object or stationary background (e.g., behind, beside, on top of, above, below).**

Core Activities: This may take several class sessions.
https://le-www-live-s.legocdn.com/sc/media/files/support/simple_machines_my%20first%20lesson%20guide-df41475c021339c4984dd2c59464b249.pdf

The four simple machine sections:

These sections provide information and activities for the four simple machines: gears, wheels and axles, levers, and pulleys. All four simple machine units are presented in the same way.
• An overview of the simple machine in focus is given. The overview starts with an introduction and with ideas for establishing the concept and providing the vocabulary relevant to the simple machine. A brief outline for using the principle models is also included.
• Following this is an overview of relevant images from Images for Classroom Use, a collection of photographs, pictures, drawings, and illustrations that can be used to support the teaching of simple machines. These images are intended to help students understand the links between the models they build and the real world. There is also an overview of the elements used for building both the principle models and the main models.
• Each unit then introduces the Teacher's Notes and student worksheets for the principle models, the related main model, and the problem-solving activity.

Materials:

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This material is designed for use by teachers of students in grades three through five, who wish to introduce their students to the following simple machines:

- Gears
- Wheels and Axles
- Levers
- Pulleys

Assessment:

- worksheet- Lego
- discussion- with teacher- questions from lesson
- working model- in group

Materials:

LEGO BRICK- MERRY GO ROUND SET- teacher can have students model in a group with instructor

The 9689 Curriculum Pack

The 9689 Brick Set

Core Activity:

https://api.gynzy.com/en/items/science/simple-machines/18/970?location_id=14

- There are six simple machines; lever, pulley, wheel and axel, inclined plane, wedge, and the screw.
- Press the "Example" button to view examples of these simple machines.
- A random simple machine is selected. Its name is displayed on your interactive whiteboard. Three random images are displayed below.
- Press the image that illustrates the selected simple machine. To find out if it's correct, press the "Check" button.
- Use the blue arrows to navigate through the available assignments.
- You can choose to show or hide the names of the items shown in the images via the "Settings" button.

Extensions:

Students will: recognize that a change in speed and direction is caused by a force, understand that a force is a push or a pull, recognize that the greater the force, the greater the change.

https://api.gynzy.com/en/lesson_plans/1267

Animated lesson

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Primary Textbooks Used for this Course of Instruction

Name of Textbook: FOSS or FOSS WEB

FOSS Investigations Guide for Teachers
Environments, Premium 3rd Edition with online access

Textbook ISBN #:

Premium Content Codes:

Textbook Publisher & Year of Publication:

Delta Education, School Specialty Science, The Regents of the University of California, 2012

32 Student Editions are included in the Environments Module

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Name of Textbook:
Science: A Closer Look, Grade 3, Life Science, Physical Science

Textbook ISBN #: 978-0-02-287987-7 (Teacher's Edition Only)

Textbook Publisher & Year of Publication: Macmillan/McGraw Hill, 2011

Curriculum Textbook is utilized in: Science 3th Grade

Name of Textbook:
Science: A Closer Look, Grade 3, Life Science

Textbook ISBN #: 978-0-02-284208-6 (Teacher's Edition only)

Textbook Publisher & Year of Publication: Macmillan/McGraw Hill, 2011

Curriculum Textbook is utilized in: Science 3th Grade

Name of Textbook:
Science: A Closer Look, Grade 3, Physical Science

Textbook ISBN #: 978-0-02-287988-4 (Teacher's Edition only)

Textbook Publisher & Year of Publication: Macmillan/McGraw Hill, 2011

Curriculum Textbook is utilized in: Science 3th Grade

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Primary Textbooks Used for this Course of Instruction

www.generationgenius.com- online text, video, exit tickets and resources

www.mysteryscience.com - online text, video, exit tickets and resources