## Summary

### How We Organize Ourselves

| Subject | Year | Start date | Duration |
|---|---|---|---|
| English, Science Lab, Social Studies | Fifth Grade | Week 4, February | 5 weeks |

## Inquiry

### Transdisciplinary Theme

**How we organize ourselves**

### The Central Idea

Similarities Influence Connections

### Lines of Inquiry

- Similarities Are Everywhere
- Communities' Are Formed Through Similarities
- Communities Yield Outcomes

### Teacher questions

- How does function relate to structure?
- What is the connection between function and structure?
- How do ideas promote purpose?

## Learning Goals

### Scope & Sequence

Social Studies

[IB] Human systems and economic activities

**Conceptual Understandings**

Formulate and ask questions about the past, the future, places and society

**Learning Outcomes**

examine the impact of particular technologies on sustainability

analyse ways that people adapt when they move from one place to another

identify the long-term and short-term effects of migration

assess settlement patterns and population distribution in selected regions, areas or countries

examine how the rights of a person in a particular society directly affect their responsibilities

identify the reasons why people feel compelled to explore the unknown

analyse how available technology influences people's abilities to navigate

identify and describe examples in which technology has changed the lives of people

describe the connection between human needs and wants and technological development

explain the relevance of various inventions in relation to the time period in which they were developed

reflect on the role of technology in his or her own life.

## [CCGPS] Historical Understandings

**Learning Outcomes**

SS5H6 The student will explain the reasons for America's involvement in World War II.

a. Describe Germany's aggression in Europe and Japan's aggression in Asia.

b. Describe major events in the war in both Europe and the Pacific; include Pearl Harbor, Iwo Jima, D-Day, VE and VJ Days, and the Holocaust.

c. Discuss President Truman's decision to drop the atomic bombs on Hiroshima and Nagasaki.

d. Identify Roosevelt, Stalin, Churchill, Hirohito, Truman, Mussolini, and Hitler.

e. Describe the effects of rationing and the changing role of women and AfricanAmericans; include "Rosie the Riveter" and the Tuskegee Airmen.

f. Explain the U.S. role in the formation of the United Nations.

SS5H7 The student will discuss the origins and consequences of the Cold War.

a. Explain the origin and meaning of the term "Iron Curtain."

b. Explain how the United States sought to stop the spread of communism through the Berlin airlift, the Korean War, and the North Atlantic Treaty Organization.

c. Identify Joseph McCarthy and Nikita Khrushchev.

## [CCGPS] Economic Understandings

**Learning Outcomes**

SS5E1 The student will use the basic economic concepts of trade, opportunity cost, specialization, voluntary exchange,

productivity, and price incentives to illustrate historical events.

a. Describe opportunity costs and their relationship to decision-making across time (such as decisions to ration goods during WWII).

b. Explain how price incentives affect people's behavior and choices (such as decisions to participate in cattle trails because of increased beef prices).

d. Explain how voluntary exchange helps both buyers and sellers (such as how specialization leads to the need to exchange to get wants and needs).

e. Describe how trade promotes economic activity (such as how the Panama Canal increases trade between countries).

f. Give examples of technological advancements and their impact on business productivity during the continuing development of the United States (such as the development of the personal computer and the internet).

English

### [CCGPS] Reading Informational

**Learning Outcomes**

Key Ideas and Details

ELACC5RI1. Quote accurately from a text when explaining what the text says explicitly and when drawing inferences from the text.

ELACC5RI2. Determine two or more main ideas of a text and explain how they are supported by key details

Craft and Structure

ELACC5RI4. Determine the meaning of general academic and domain-specific words and phrases in a text relevant to a grade 5 topic or subject area.

### [CCGPS] Writing

**Learning Outcomes**

Text Types and Purposes

ELACC5W3. Write narratives to develop real or imagined experiences or events using effective technique, descriptive details, and clear event sequences.

ELACC5W3.b. Use narrative techniques, such as dialogue, description, and pacing, to develop experiences and events or show the responses of characters to situations.

ELACC5W3.c. Use a variety of transitional words, phrases, and clauses to manage the sequence of events.

## Standards and benchmarks

Georgia State Standards: GSE: Fine Arts: Music (2018)
General Music (Grade 5)

Creating
ESGM5.CR.1 Improvise melodies, variations, and accompaniments. Improvise rhythmic phrases.

a. Improvise melodies and accompaniments.

Performing
ESGM5.PR.1 Sing a varied repertoire of music, alone and with others.

a. Sing accompanied and unaccompanied melodies within an appropriate range using head voice.

ESGM5.PR.2 Perform a varied repertoire of music on instruments, alone and with others.

a. Perform rhythmic patterns with body percussion and a variety of instruments using appropriate technique.

c. Perform body percussion and instrumental parts, including ostinatos, while other students play or sing contrasting parts.

d. Perform multiple songs representing various genres, tonalities, meters, and cultures.

e. Perform instrumental parts expressively, following the cues of a conductor.

ESGM5.PR.3 Read and Notate music.

a. Read, notate, and identify, in various meters, iconic, and standard notation (e.g. quarter notes, quarter rests, barred eighth notes, half notes, half rests, dotted half notes, barred sixteenth notes, whole notes, whole rests, dotted quarter notes, single eighth notes, eighth rests, triplets).

Responding
ESGM5.RE.1 Listen to, analyze, and describe music.

a. Distinguish between repeating and contrasting sections, phrases, and formal structures (e.g. AB, ABA, verse/refrain, rondo, introduction, coda, theme/variations).

b. Describe music using appropriate vocabulary (e.g. fortissimo/pianissimo, presto/largo/moderato/allegro/adagio, legato/staccato, major/minor), intervals (e.g. step, skip, repeat, leap), timbre adjectives (e.g. dark/bright), and texture (e.g. unison/harmony).

c. Identify and classify (e.g. families, ensembles) classroom, orchestral, American folk and world instruments by sight and sound.

ESGM5.RE.2 Evaluate music and music performances.

a. Use teacher-provided and collaboratively developed criteria for evaluation of music and music performances (e.g. learned, student composed, improvised).

b. Use formal and/or informal criteria to evaluate music and musical performances by themselves and others.

c. Refine music performances by applying personal, peer, and teacher feedback.

ESGM5.RE.3 Move to a varied repertoire of music, alone and with others.

a. Respond to contrasts and events in music with locomotor and non-locomotor movement.

Connecting
ESGM5.CN.1 Connect music to the other fine arts and disciplines outside the arts.

b. Discuss connections between music and disciplines outside the fine arts.

ESGM5.CN.2 Connect music to history and culture.

a. Perform and respond to music from various historical periods and cultures.

Georgia State Standards: GSE: Fine Arts: Visual Arts (2017)

Creating (Grade 5)

VA5.CR.1 Engage in the creative process to generate and visualize ideas by using subject matter and symbols to communicate meaning.

a. Utilize multiple approaches to plan works of art, incorporating imaginative ideas, universal themes, and symbolic images.

b. Apply available resources, tools, and technologies to investigate personal ideas through the process of making works of art.

c. Produce multiple prototypes in the planning stages for a work of art (e.g. sketches, 3D models).

VA5.CR.2 Create works of art based on selected themes.

b. Create works of art emphasizing multiple elements of art and/or principles of design.

c. Create representational works of art from direct observation (e.g. landscape, still life, portrait).

VA5.CR.3 Understand and apply media, techniques, processes, and concepts of twodimensional art.

a. Refine drawings and paintings with a variety of media (e.g. pencil, crayon, pastel, charcoal, tempera, watercolor, acrylic).

c. Utilize a variety of materials in creative ways to make works of art (e.g. mixed-media, collage, or use of available technology).

e. Apply multiple spatial concepts to create works of art (e.g. one point perspective, atmospheric perspective, positive and negative space).

VA5.CR.5 Demonstrate an understanding of the safe and appropriate use of materials, tools, and equipment for a variety of artistic processes.

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Responding (Grade 5)

VA5.RE.1 Use a variety of approaches for art criticism and to critique personal works of art and the artwork of others to enhance visual literacy.

b. Explain how selected elements and principles of design are used in works of art to convey meaning.

Connecting (Grade 5)

VA5CN.1 Investigate and discover the personal relationships of artists to community, culture, and the world through making and studying art.

b. Explore and interpret ideas, themes, and events from diverse cultures of the past and present to inform one's own

work.

e. Investigate ways in which professional artists contribute to the development of their communities (e.g., architects, painters, photographers, interior and fashion designers, educators, museum educators).

VA5.CN.2 Integrate information from other disciplines to enhance the understanding and production of works of art.

a. Describe and discusses various art-related careers and how design impacts daily life (e.g. art historian, art critic, curator, web designer, game designer, fine artist).

VA5.CN.3 Develop life skills through the study and production of art (e.g. collaboration, creativity, critical thinking, communication).

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Georgia State Standards: GSE: Physical Education (2018)
Fitness (Grade 5)

PE5.3 The physically educated student demonstrates knowledge and skills to help achieve and maintain a health-enhancing level of physical activity and fitness.

a. Summarizes the effects of physical activity on body systems.

c. Participates in the Georgia Fitness Assessment Program with teacher supervision.

d. Compares Georgia Fitness Assessment results to Health Fitness Zones (HFZ).

e. Identifies strategies to improve areas of need based on the Georgia Fitness Assessment results (with teacher assistance).

f. Reassesses health related fitness to determine improvement and/or non-improvement areas.

g. Engages in teacher-led and independent physical education class activities.

h. Analyzes opportunities for participating in physical activity outside physical education class for fitness benefits.

Personal and Social Behavior, Rules, Safety, and Etiquette (Grade 5)

PE5.5 The physically educated student recognizes the value of physical activity for health, enjoyment, challenge, self-expression, and/or social interaction.

a. Compares the health benefits of participating in physical activity.

Georgia State Standards: GSE: Science (2016)
Life Science (Grade 5)

S5L2. Obtain, evaluate, and communicate information showing that some characteristics of organisms are inherited and other characteristics are acquired.

a. Ask questions to compare and contrast instincts and learned behaviors.

b. Ask questions to compare and contrast inherited and acquired physical traits.

S5L4. Obtain, evaluate, and communicate information about how microorganisms benefit or harm larger organisms.

a. Construct an argument using scientific evidence to support a claim that some microorganisms are beneficial.

b. Construct an argument using scientific evidence to support a claim that some microorganisms are harmful.

## Key and Related Concepts

### Key Concepts

| Key Concepts | Key questions and definition | Related concepts | Subject Focus |
|---|---|---|---|
| Form | **What is it like?** The understanding that everything has a form with recognizable features that can be observed, identified, described and categorized. | Properties, Structure | |
| Connection | **How is it linked to other things?** The understanding that we live in a world of interacting systems in which the actions of any individual element affect others. | Conflict, Conformity | Social Studies |

## Developing IB Learners

### Learner Profile

Inquirers

Communicators

Description
Student-centered: Choose an invention that impacts you life today! Why is this invention important to you? How can you change or adjust

## ATL Skills

### Approaches to Learning

Description
Transdisciplinary Skills: Recording Data, Organizing Data, Interpreting Data, Application, Analysis, Synthesis, Evaluation, Listening, Speaking, Reading, Writing.

### Research Skills

- Information literacy - Formulating and planning, data gathering and recording, synthesizing and interpreting, evaluating and communicating

  Formulating and planning

  Ask or design relevant questions of interest that can be researched.

  Data gathering and recording

  Gather information from a variety of primary and secondary sources.

  Record observations by drawing, note taking, charting, tallying, writing statements, annotating images.

  Synthesizing and interpreting

  Sort and categorize information: arrange information into understandable forms such as narratives, explanatory and procedural writing, tables, timelines, graphs and diagrams.

  Evaluating and communicating

  Draw conclusions from relationships and patterns that emerge from data.

## Action

### Student-initiated Action

Social Studies: Students studied many different scientist that developed and created new inventions at the turn of the century that help lead the world into future at this time.

## Assessment & Resources

### Ongoing Assessment

G5

Inventions_Project_Rubric.docx
May 31, 2022

Kami Export - InfectiousDiseaseResearchProjectWantedPosterActivityforMicroorganisms-1.pdf
5.96 MB

IMG_4502.PNG Sep 20, 2021Health_Fitness_Components_2021_-_Google_Forms.pdf Sep 20, 2021What are the possible ways of assessing students' understanding of the central idea? What evidence, including student-initiated actions, will we look for?

How do the standards help students understand that structure leads to sucessful function?

**How We Organize Ourselves – Structure and Function**

**Central Idea: Function depends on structure**

*Note: Show Premade Wanted Poster*

**Goal:** To create a wanted poster for a disease.

**Role:** You are one of the following: You are a scientist researching an infectious disease. Students must list the name of the disease, what is the cause, what happens to the person who gets the disease, what is the cure and ways to prevent it. Lastly, where is the disease found in the world and provide a general understanding?

**Audience:** Students in grades K-5, hung in the hallway.

**Situation**: The students work to create a wanted poster based on an infectious disease.

**Product:** Students work individually to complete their wanted poster using a rubric and student handout (Google Slides).

**Standard**: SS5CG1-CG3, SS5G2, SS5H1, SS5E1 ELAGSE5SL1, ELAGSE5W2,

**S5L2. Obtain, evaluate, and communicate information showing that some characteristics of organisms are inherited and other characteristics are acquired.**

**S5L4. Obtain, evaluate, and communicate information about how microorganisms benefit or harm larger organisms.**

*What are the possible ways of assessing students' prior knowledge and skills? What evidence will we look for?

*KWL, class discussion, hook activities, wonder chart

*What are the possible ways of assessing students' understanding of the central idea? What evidence, including student-initiated actions, will we look for?

### Student Self-assessment and Peer Feedback

Music Class: https://docs.google.com/forms/...

## Learning Experiences

### Designing engaging Learning Experiences

**Gifted/Enrichment activities:**

G5 How We Organize Ourselves.docx
93.15 KB

**Student-Friendly Rubric**
Sep 20, 2021

**5th_Artifacts_Planner_1.pdf**
Sep 20, 2021

**How we organize ourselves:**

- Structure of an idea
  - Science:
    - Structure of circuits and electricity
  - Social Studies:
    - Structure of an assembly line and the military
- Interdependence
  - Science
    - Conductors and insulators -circuits
  - Social Studies
    - Building the whole car vs one job on assembly line
- Changes
  - Science:
    - Series vs parallel open vs closed
  - Social Studies
    - Whole car/assembly line, WWI countries alliance

Additional activities: use the story from Journeys and go into 4th grade classes to have them guess the historical figure

**Music**

Key Concepts: Change and Connection

Central Idea: Similarities depend on connections.

Learner Profile: Students will develop risk-taking and communicating learner profiles by creating music that sells a product in the jingle project.  Students will assess how music connects to their product to create an innovative and informative presentation.

Assessment:

-Performance-based assessment on jingle.

-Self or peer assessment.

**Art Class Instruction:**

Key Concepts: Form, change, connection

Students will focus on IB profiles: knowledgeable, open-minded, reflective by:

-creating works of art that display both elements of art: line and shape as well as color and form

-identifying how form can affect the look and feel of an artwork

-Making connections to other artists around the world through table talks, videos, and artistic exposure

-Studying the art of "Romero Britto" and executing his bold and colorful style.

-making connections to other disciplines - science, and math. Example: organic and geometric line

-reviewing "composition" and how it relates to multiple disciplines.

-Discussing in class how Romero Britto grew up, and what makes him "successful".

-participating in class discussions and problem solving to make artistic connections

-planning a rough draft, and executing their final designs.

Assessment: Romero Britto Inspired Initials

**Physical Education:**

Key Concepts: Form and connection

Students will use the correct form when performing their exercises for the Fitnessgram assessment and make the connection between fitness and good health.

Learner Profile:  Communicator

Students will use non-verbal communication to identify testing errors with partners during the Pacer assessment.

Activities and Assessments:

Fitnessgram Assessments - pacer test, cardiorespiratory endurance; curl-up test, muscular endurance; push-ups test, muscular strength; back saver sit and reach test, flexibility; height, and weight, body composition.

**Science Class Instruction:**

Key Concepts: connection, form, change

- Students will experience science and engineering practices with an Art-bot STEAM design challenge. Students will learn first hand how function depends on structure.
- Students will investigate the form/structure of atoms, static electricity, human-harnessed electricity,circuits, magnetism, and electromagnetism. Virtual Learning Kits creaed for each student.
    - Students will utilize the FOSS electricity kits to create and investigate changes of series vs parallel open vs closed circuits and demonstrate the interdependence of conductors and insulators in creating functioning circuits.
    - Students will utilize FOSS kits to create experimental evidence of the functional differences between, magnets and electromagnets.
    - Students will then plan and carry out investigations to observe interactions between a magnetic field and magnetic object (SNAP circuits, lemon experiment, circuit testers, resistors)

Questioning: Does changing the structure of my circuit change the function

Unit of Study: electricity and magnetism (cannot attach file)

**Spanish -**

Key Concepts: Form, change, connection

Students will focus on IB profiles: knowledgeable, open-minded, reflective
Students will become knowledgeable about how accessing electricity functions around the world specifically in Spanish-speaking countries.

Students will investigate by reading articles about students around the world use and gain access to energy and how it connects to lifestyle.

**Social Studies:**

Map Skills: Students must understand directional changes of the railroads/cattle drives as well as geographical locations (kitty hawk, Pittsburgh, etc- see standard for specifics). Use specific maps to locate key locations.

Inventors: Students understand that the inventors had to provide a structure for their invention and that the product are able to provide an understandng of the function of the invention.

Economics: Students must understand cattle had different economic value based on location. Students understand difference between GW Trail and Chisholm trail. Use of graphic organizer related to the two trails.

**Novel Study Options**: The Orphan of Ellis Island

**Visible Thinking Strategy Option**s: 3-2-1 Bridge, Think-Puzzle, Explore

## Reflections

### General Reflections

#### Looking Back

**Whitney Niles** Dec 10, 2020 at 1:15 PM

-To monitor, document, and measure learning, we incorporated more virtual aspects including: Nearpod, Padlet, Google Slides, Google Jamboards, and Graphic Organizers.
-The evidence that we gathered about students' knowledge, conceptual understandings, and skills was collected through final projects and end of unit assessments.
-Students reflected on the learner profile through SEL. Students made reflections to the central idea through the use of the Turn of Century graphic organizer (structure and function of inventors/inventions & immigration stations). Students made reflections about the structure of electricity and demonstrated new knowledge by videotaping themselves creating types of circuits.

**Marsha Cherichel** Nov 30, 2021 at 3:44 PM

We tried to permeate the central idea of structure and function throughout our units. We discussed the structure and function of the two cattle drives, electricity and magnetism. Evidence included the talk show grasp, visible thinking strategies (CSI, Zoom in.) Students also completed a magnetic based project.

**Marsha Cherichel** Nov 30, 2021 at 3:46 PM

Students completed reflection evidence based questions at the end of the summative grasp/unit of study. In our science units students were required to complete trial/error experiments (magnetic) Students completed a table highlighting key information of inventors and their inventions

**Erica Pease** Feb 1, 2023 at 8:51 AM

Science evidence: Full project that show functioning structure with either electromagnets or magnets. Rubric based. Experimental evidence with function/purpose

Talk Show: We ran out of time and moved the GRASP to reflect the structure and function of the roaring 20s unit.

**Rachel Bailey** May 16, 2024 at 1:03 PM

**Goal:** To create a wanted poster for a disease.

We were unable to complete the Ongoing Assessment for this planner. Unfortunately, with Milestones testing and PYP Exhibition prep, we could not fully implement the unit on Cells and Microorganisms. Instead, students participated in a Gizmo activity on cells and were able to take a closer look at cells with the use of a microscope (lab experience).

Team Members Present: All Team Memebers

## Looking Forward

**Whitney Niles** Dec 10, 2020 at 1:19 PM

-We discovered that virtual learning added a challenge to the implement planners successfully.
-We can strengthen transdisciplinary connections by maintaining a concept-based focus.
-Modify planners to fit virtual teaching and learning.

**Marsha Cherichel** Nov 30, 2021 at 3:50 PM

Next year we will add the learner profile to the unit of study grasp as well as the inventors table and the science project (magnets) To strengthen our units we will bring the verbiage more into math, writing and ELA. Specifically during Eureka module 2/place value. We will continue to include the central idea into literary elements such as theme main idea, etc (Home of the Brave novel study)

**Erica Pease** Feb 1, 2023 at 8:52 AM

continue with the magnet project; we feel it tied into the central idea and key concepts. Continuous looking for ways to implement transdisciplinary instruction.

**Rachel Bailey** May 16, 2024 at 1:10 PM

Moving forward, we will continue to prioritize active learning experiences that empower students to inquire, reflect, and make connections between concepts and contexts.

Team Members Present: All Team Memebers

### Additional Subject Specific Reflections

**Marsha Cherichel** Nov 30, 2021 at 3:51 PM

Narrative writing: structure and function of a narrative piece

Focus more on the  place value charts and the structure they add to the value of the number.  (Place determines the value)

Science: Building more background knowledge within the unit of magnets and electricity.

## Stream & Resources

### Resources

**Note** posted on Aug 15, 2019 at 9:48 AM

Discovery Education, BrainPop, AIMS materials, YouTube videos, TED-ED