



## #5 Systems and Resources HWO (23-24)

**Duration:** 6 Weeks, 5 hours  
**Unit dates:** 23rd Aug 2023 - 4th Oct 2023  
**Subjects:** Math, Library Media, Social Studies, English  
**Grades:** 1

### Planning



#### Transdisciplinary theme

How we organize ourselves

Transdisciplinary theme focus

- the interconnectedness of human-made systems and communities



#### Central idea

The ways systems are created can be connected to resource management.



#### Learner profile attributes

Thinkers



#### Key concepts

Responsibility, Change, Form



#### Related concepts

Concepts

- **Responsibility:** resources
- **Change:** innovation
- **Form:** systems



## Lines of inquiry

- How systems are developed and improved (innovation, change)
- The factors that influence decision-making in managing resources (resources, responsibility)
- Different systems that exist within communities and organizations (systems, form)



## Approaches to learning

### Self-management skills

#### Self-Management Skills

#### Self-Management Skills (General)

#### Teaching the ATL skills

Self-Management as students will consider systems they use for organization and self-management.

## Safer Smarter Kids



## Subject standards

### Social Studies

#### Civics

##### Processes, Rules and Laws

- CIV1.9 - Describe how people have tried to improve their communities over time. (CIV1.9)

#### Economics

##### Exchange and Markets

- ECO 1.3 - Describe the goods and services that people in the local community produce and those that are produced in other communities. (ECO 1.3)
- ECO 1.4 - Explain how people earn income. (ECO 1.4)

##### Economic Decision-Making

- ECO 1.1 - Explain how scarcity necessitates decision-making. (ECO 1.1)
- ECO 1.2 - Identify the benefits and costs of making various personal decisions. (ECO 1.2)

#### Geography

##### Human-Environment Interaction: Places, Regions and Culture

- GEO 1.4 - Explain how weather, climate, and other environmental characteristics affect people's lives in places or regions. (GEO 1.4)

##### Geographic Representations and Spatial Views of the World

- GEO 1.3 - Use maps, globes, and other simple geographic models to identify cultural and environmental characteristics of places. (*GEO 1.3*)
- GEO 1.1 - Construct maps, graphs and other representations of familiar places. (*GEO 1.1*)

## Math

### Number & Operations in Base Ten

Use place value understanding and properties of operations to add and subtract.

- CCSS.MATH.CONTENT.1.NBT.C.5 - Given a two-digit number, mentally find 10 more or 10 less than the number, without having to count; explain the reasoning used. (*CCSS.MATH.CONTENT.1.NBT.C.5*)

### Measurement and Data

Represent and interpret data.

- CCSS.MATH.CONTENT.1.MD.C.4 - Organize, represent, and interpret data with up to three categories; ask and answer questions about the total number of data points, how many in each category, and how many more or less are in one category than in another. (*CCSS.MATH.CONTENT.1.MD.C.4*)

## English

### Reading: Literature

Integration of Knowledge and Ideas

- CCSS.ELA-LITERACY.RL.1.7 - Use illustrations and details in a story to describe its characters, setting, or events. (*CCSS.ELA-LITERACY.RL.1.7*)

### Reading: Informational Text

Integration of Knowledge and Ideas

- CCSS.ELA-LITERACY.RI.1.8 - Identify the reasons an author gives to support points in a text. (*CCSS.ELA-LITERACY.RI.1.8*)
- CCSS.ELA-LITERACY.RI.1.7 - Use the illustrations and details in a text to describe its key ideas. (*CCSS.ELA-LITERACY.RI.1.7*)

Key Ideas and Details

- CCSS.ELA-LITERACY.RI.1.2 - Identify the main topic and retell key details of a text. (*CCSS.ELA-LITERACY.RI.1.2*)

### Writing

Research to Build and Present Knowledge

- CCSS.ELA-LITERACY.W.1.7 - Participate in shared research and writing projects (e.g., explore a number of "how-to" books on a given topic and use them to write a sequence of instructions). (*CCSS.ELA-LITERACY.W.1.7*)

Text Types and Purposes

- CCSS.ELA-LITERACY.W.1.2 - Write informative/explanatory texts in which they name a topic, supply some facts about the topic, and provide some sense of closure. (*CCSS.ELA-LITERACY.W.1.2*)



### Connections: Transdisciplinary and past

Library- Students will explore both the Library and Recycling Systems through literature. Students will read Do You Know Dewey? Dewey There's a Cat in the Library, Pablo Finds a Treasure and Maya's Blanket.



## Teacher questions

Questions:

- What is a system?
- What are the parts of this system?
- How do the parts of this system work together?
- What problem or need does this help?
- What responsibilities do people have to make this system work/function?
- What connections/similarities do you see between systems?

## Implementing



## Learning experience library



### IRA (2-5) - Standing Up for Yourself

Amy Rios

Why is it important to stand up for yourself?

Bootsie Barker Bites (1)

Daisy Comes Home (0)

Stand Tall, Molly Lou Melon (1)

King of the Playground (2)

Amazing Grace (2)



### Gather - Data from trash collection

Amy Rios

Classes have collected and sorted garbage into 4 containers (recyclables, food waste, trash, paper recyclables).

Classes will determine if they were able to reduce food waste and/or trash and increase food consumption and recycling.



### Create - PSA

Amy Rios

PSA could be in the form of a poster, labeling in the cafeteria, video, script for morning announcements,



### Evaluate

Amy Rios

Teacher collects ideas from students (could use sticky notes, or whole class conversation). Teacher can select from the questions below.

- What did you like the most about this unit?
- What new skills/knowledge did you acquire in the unit?
- What might you want more help with?

**Great Pacific Garbage Patch Video**

Amy Rios

**Field Trip - Fiddleheads**

Amy Rios

Use website to see local farms that provide food.  
Visit fiddleheads to examine systems.

**Open-Journey of a letter video**

Amy Rios

**Library 18-19**

Amy Rios

Students will explore systems through literature- Ada's Violin by-Susan Hood, Taking Care of our Earth and How to Recycle (Discovery Education,  
The Red Bicycle: The Extraordinary Story of One Ordinary Bicycle by- Isabella Jude, Hear Your Heart by- Paul Showers.

**IRA (3-4) - Bob Graham: Exploring Everyday Life**

Amy Rios

How does an author or illustrator make decisions to interest readers?

The Silver Button (3)

How to Heal a Broken Wing (4)

Let's Get a Pup! Said Kate (4)

April and Esme Tooth Fairies (1)

**Explore - Brain Pop Jr.**

Amy Rios

<https://jr.brainpop.com/science/conservation/reducereuserecycle/>

**IRA UOI Text Sets**

Amy Rios

Adventures of a Plastic BottleAdventures of an Aluminum CanBag in the WindFollow That Bottle! A Plastic Recycling JourneyFollow that Paper! A Paper Recylcing JourneyMichael RecycleOne Plastic BagRecycle Every Day!Recycle!Soda Bottle SchoolWhere Does the Garbage Go?What Happens to Trash?

**Explore- Pebble Go (money)**

Amy Rios

**Send home graph/chart for students to track their personal recycling at home.**

Amy Rios

**Open-Mr. Roger's trip to the Crayola factory**

Amy Rios



## IRA (5) - Exploring Nonfiction

Amy Rios

What is the writer's reason for writing?

Tools (3)

Water: Up, Down, and All Around (4)

What if You Had Animal Teeth!? (3)

Surprising Sharks (7)

What Do You Do When Something Wants to Eat You? (4)



## Identify

Amy Rios

Each class will identify a question that they want to explore and take action on.

How can we improve recycling systems in our classroom, school, or home?

What actions can we take to encourage more people to recycle?

How can we reduce food waste or waste in general?



## PSPE-18-19

Amy Rios

physical fitness unit: individual responsibility for a healthy lifestyle, human body systems.

Bowling unit- each student in each lane has a job (responsibility) to be organized and to make it so each student has a fair turn to bowl.

The job responsibilities resemble what the machines do in a bowling alley.



## Art-

Amy Rios

Students will investigate ways that artists use recycled materials to create a collaborative art project inspired by Dale Chihuly.

They will learn about his system for planning and installing largescale glass sculptures. (change, responsibility)



## Music

Amy Rios

Students investigate sheet music and determine why we use sheet music and determine how it connects with our transdisciplinary theme. (form)



## Explore- maps on PebbleGo

Amy Rios



## Share

Amy Rios

morning announcements or ASMM

or hanging posters/graphics in the cafeteria.



## Video for an indoor day

Amy Rios

Magic School Bus Recycles



## Storybots -- Why do we have to recycle?



Amy Rios



### Explore-Interview

Amy Rios

Interview specials teachers about systems they use.  
Record in inquiry journal.



### Explore- Pebble Go (People and Environment)

Amy Rios



### Immerse-Systems of our School

Amy Rios

Visiting different systems arounds school and community.  
Students will record their see-think-wonder.  
Start in classroom and ID systems (line spots, baskets, routines)  
A system in our classroom is....  
Library, cafeteria, front desk, nurse's office, carline, arrival/dismissal,  
A system in our school is...  
A system in our home is.....  
Make a notebook (Foundations paper) as an inquiry journal.



### SCRRRA Recycling Facility

Amy Rios

Link to...  
"What goes where?" Type in an item and it will tell you if it's recyclable or garbage.  
Waste Sorting Game



### Resources

- [What Goes Where?](#)
- [How Big The Great Pacific Garbage Patch Really Is](#)
- [PebbleGo](#)
- [Watch Ask the StoryBots | Netflix Official Site](#)
- [The Magic School Bus - Holiday Special - Ep. 36](#)
- [PebbleGo](#)
- [PebbleGo](#)
- [PebbleGo](#)
- [A visit to a crayon factory - Mister Rogers' Neighborhood](#)
- [Supermarkets in Thailand Are Replacing Plastic Packaging With Banana Leaves](#)
- [Journey of a Letter](#)
- [My Heart | Reading A-Z](#)
- [Circulatory System - BrainPOP](#)
- [My Lungs | Reading A-Z](#)

-  [Respiratory System - BrainPOP](#)
-  [My Muscles | Reading A-Z](#)
-  [Muscles - BrainPOP Jr.](#)
-  [Digestive System - BrainPOP Jr.](#)
-  [Digestive System - BrainPOP Jr.](#)
-  [Reduce, Reuse, Recycle - BrainPOP Jr.](#)
-  [Supermarkets in Thailand Are Replacing Plastic Packaging With Banana Leaves](#)