Una Tierra: Caring for the Earth in Argentina and the U.S.

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Subject Area: World Cultures
Topic: Pollution, recycling and conservation in Argentina and the U.S.
Grade Level: Grade 4
Lessons: 7 (time frame varies)

Summary of the Unit:

This unit will require students to critically investigate themes of pollution, recycling and conservation in Argentina and the United States of America (U.S.). By studying maps, photographs, video and informational texts, students will compare the diverse geographic regions of Argentina and uncover parallels between Argentine and North American landscapes. Students will compare polluted waterways in Argentina and the U.S., as well as ways in which each country recycles. Students will be introduced to Argentine artists, analyze their art and design a piece of art out of recycled materials. Students will participate in a service project and will reflect on their relationship with the environment. Finally, students will report on what they learned from the "Una Tierra" unit with the objective of sharing their news with a class in Argentina. Through the themes of pollution, recycling and conservation, students are encouraged to engage as global citizens, who reflect, compare, communicate and find interconnectedness between countries and cultures.

GOALS

- Students will identify similarities, in geography and human interaction with the environment, that connect Argentina and the U.S.
- Students will explain environmental concerns in Argentina and the U.S.
- Students will investigate trash production, pollution and recycling in Argentina and the U.S.
- Students will take on a service project that benefits the environment.

UNDERSTANDINGS

- All people and nations are responsible for protecting the environment from pollution
- Argentina and the U.S. have processes and habits relating to the environment
- Individual people can take action to lessen pollution

ESSENTIAL QUESTIONS

- What are connections between the geography of Argentina and the U.S.?

- How is trash a global problem?
- How is recycling different and the same in Argentina and the U.S.?
- What are common impacts of trash and waste on the environment?
- How can we improve the environment?
- What is your relationship to the environment?

COMMON CORE ENGLISH LANGUAGE ARTS (ELA) STANDARDS

- RI.4.1. Refer to details and examples in a text when explaining what the text says explicitly and when drawing inferences from the text.
- RI.4.2. Determine the main idea of a text and explain how it is supported by key details; summarize the text.
- SL.4.1. Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on *grade 4 topics and texts*, building on others' ideas and expressing their own clearly.
- SL.4.4. Report on a topic or text, tell a story, or recount an experience in an organized manner, using appropriate facts and relevant, descriptive details to support main ideas or themes; speak clearly at an understandable pace.
- W.4.1. Write opinion pieces on topics or texts, supporting a point of view with reasons and information.
- W.4.3. Write narratives to develop real or imagined experiences or events using effective technique, descriptive details, and clear event sequences.
- W.4.8. Recall relevant information from experiences or gather relevant information from print and digital sources; take notes and categorize information, and provide a list of sources.

DC PUBLIC SCHOOLS MATHEMATICS STANDARDS

- 4.DASP.1. Collect and organize data using observations, measurements, surveys, or experiments, and identify appropriate ways to display the data.
- 4.DASP.3. Compare two data sets represented in two bar graphs, pie graphs, and histograms.

DC PUBLIC SCHOOLS SCIENCE STANDARDS

- 4.7.10. Investigate the Chesapeake Bay watershed and wetlands, and describe how they support a wide variety of plant and animal life that interact with other living and nonliving things.

DC PUBLIC SCHOOLS VISUAL ARTS STANDARDS

- 4.1.1. Explore the significance and purpose of art.
- 4.1.3. Describe and analyze the elements of art, (e.g., line, color, shape, form, texture, space, and value) emphasizing form, as they appear in works of art.

LESSON 1

TITLE / TOPIC: Geography of Argentina

COMMON CORE ELA STANDARDS

- RI.4.1. Refer to details and examples in a text when explaining what the text says explicitly and when drawing inferences from the text.
- RI.4.2. Determine the main idea of a text and explain how it is supported by key details; summarize the text.
- SL.4.1. Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on *grade 4 topics and texts*, building on others' ideas and expressing their own clearly.

OBJECTIVES (SWBAT)

- Categorize photos of American and Argentine landscapes.
- Identify important facts in non-fiction text.
- Share facts about a region in Argentina with a small group.
- Label major physical features and political features (capital, cities, and provinces).

ASSESSMENTS

- Categorize photos of American and Argentine landscapes
- Assignment about different regions
- Maps of provinces and landforms

ESSENTIAL QUESTION

- What are connections between the geography of Argentina and the U.S.?

MATERIALS REQUIRED

- Photos of American and Argentine landscapes (attached)
- A large map of Argentina and a large U.S. map
- Information on different regions in Argentina for each of the region stations: students can search each region on the website "Argentina Invites You," http://www.turismo.gov.ar/eng/menu.htm, teachers can print from this site or order brochures by emailing info@turismo.gov.ar
- Regions assignment (attached)
- Atlases
- Blank map of Argentina with and without provinces

INTRODUCTION

- Introduce "Una Tierra" unit and objectives, identify where Argentina is in the world, and pose the essential question.

TASK BY TASK LEARNING ACTIVITIES

1. In groups of 6, categorize photos as American landscapes or Argentine landscapes.
2. Using large maps of Argentina and the U.S., check students' work by posting photographs according to where the sites in the photographs are located.
3. Jigsaw: within their groups, number off, go to numbered “region stations,” read about one region and answer questions, then return to original group; each student will share facts about each region to aid their group in assignment completion.
4. Using an atlas, complete a map of Argentina by adding provinces and capitals.
5. Using an atlas, complete a map of Argentina by adding landforms.

CLOSURE / WRAP-UP

- Students share research and/or maps.
- Revisit essential questions.
- A major characteristic Argentina's landscape is the vast contrast between the rivers and subtropical rainforests in the north, the central and eastern plains, the Andes Mountain range (with the highest peak in the western hemisphere, Aconcagua) located in the west, and the forests and glaciers of Patagonia in the south.

LESSON 2

TITLE / TOPIC: Recycling in the U.S. and Argentina

DCPS MATHEMATICS STANDARDS

- 4.DASP.1. Collect and organize data using observations, measurements, surveys, or experiments, and identify appropriate ways to display the data.
- 4.DASP.3. Compare two data sets represented in two bar graphs, pie graphs, and histograms.

OBJECTIVES (SWBAT)

- Reflect on how trash is managed in Argentina and the U.S.
- Calculate how much trash in produced by certain populations.

ASSESSMENTS

- "How Much Waste Do We Make?" assignment
- Poster

ESSENTIAL QUESTIONS

- How is trash a global problem?
- How is recycling different and the same in Argentina and the U.S.?
- What are common impacts of trash and waste on the environment?
- How can we improve the environment?
- What is your relationship to the environment?

MATERIALS REQUIRED

- Paper for posters
- Calculators that calculate large numbers
- Recycling in Washington area video: "Waste Management: Recycle America." http://alexandria.granicus.com/ViewPublisher.php?view_id=29&coa_clip_id=731&coa_view_id=29. City of Alexandria, Virginia. 23 January 2009. Web. 27 November 2011.
- "What Can We Recycle?" PowerPoint (available for download from this website: http://lanic.utexas.edu/project/etext/llilas/outreach/argentina11/)
- "Cartoneros" PowerPoint (available for download from this website: http://lanic.utexas.edu/project/etext/llilas/outreach/argentina11/) Please see notes section for speaking points.
- "How Much Waste Do We Make?" assignment (numbers were rounded to assist students with their calculations) (attached)
- Poster rubric (attached)

INTRODUCTION

- What happens to all the trash you throw away?
- Where does it go?
- What happens to waste at a landfill?

- What are possible problems with filling up landfills with waste?
- Define recycling and how doing it benefits the environment.

TASK BY TASK LEARNING ACTIVITIES

1. Show “What Can We Recycle?” slideshow. Students will give a thumbs up or thumbs down to tell whether you can or cannot recycle an item. Discuss answers (provided in notes section of PowerPoint).
2. Show a portion of a video about how Waste Management recycles in the Washington, DC metropolitan area.
3. Show slideshow about cartoneros, explain history of cartoneros.
4. Question students – How many pounds of trash do you think are thrown out each day for every person in DC? In Argentina?
5. Introduce math project/ poster project.
6. Students work in groups to complete one of the “How Much Waste Do We Make?” assignments (four different worksheets are attached).
7. Students complete poster project independently.

TECHNOLOGY TO BE USED

- Computer
- Projector

CLOSURE / WRAP-UP

- Students share trash data posters:
    - How do you feel about the amount of trash that is thrown out each day?
    - How have increases in human population and amounts of trash affected the environment?
    - What are your predictions for the effect of future human population growth on the environment?
    - What predictions can you make for the amounts of trash we will produce in the future?
- Revisit essential questions.

LESSON 3

TITLE / TOPIC: Recycled Art

DCPS VISUAL ARTS STANDARDS
- 4.1.1. Explore the significance and purpose of art.
- 4.1.3. Describe and analyze the elements of art, (e.g., line, color, shape, form, texture, space, and value) emphasizing form, as they appear in works of art.

OBJECTIVES (SWBAT)
- Examine ways recyclable materials are used by Carlos Regazzoni, Antonio Berni, Argentine school children, and Tom Szaky.

ASSESSMENTS
- List of project ideas
- See Lesson 4

ESSENTIAL QUESTION
- How is trash a global problem?
- How can we improve the environment?

MATERIALS REQUIRED
- Photos from “Juanito Lagunas.” http://coleccion.educ.ar/coleccion/CD5/contenidos/bernichicos/galeria/juanito.html. Galería Berni para niños. n.d. Web. 12 December 2011.
- Information and photos from Carlos Regazzoni's website: http://www.regazzoniarts.com/?lang=en
- Video: Allen, Natalie and Matthew Knight. "Recycling the world's trash into cash." http://www.cnn.com/2011/10/10/world/americas/terracycle-recycling-waste-szaky/index.html. CNN. 10 October 2011. Web. 10 December 2011.
- Recyclable materials
- Art supplies

INTRODUCTION
- Today you are going to learn about different ways that people use trash and recyclable materials. During today's lesson, you will make a list of ideas about ways you would like to reuse or repurpose trash or recyclable materials in an art project.

TASK BY TASK LEARNING ACTIVITIES
1. Mini-lesson on Argentine Antonio Berni
   a) Antonio Berni was born on May 14, 1905, in Rosario, Santa Fe province, Argentina. He created surrealist paintings and collages. The Merriam-Webster dictionary defines surrealism as “the principles, ideals, or practice of producing fantastic or incongruous imagery or effects in art, literature, film, or theater by means of unnatural or irrational juxtapositions and combinations.”

Berni is well-known for his character Juanito Laguna, a boy from the slums. To tell the story of Juanito, he made collages out of waste materials such as sheet metal, cardboard, wood and surplus industrial materials. Throughout his life, his work was praised by many people. He died in Buenos Aires on October 13, 1981.

b) Analyze Berni's Juanito Laguna paintings and collages. Questions to guide discussion:
   i) Describe what you see. Describe who you see.
   ii) How has the artist used line, shape, color, value, space and texture?
   iii) What materials has the artist used?
   iv) Interpret what the artist is telling you with his work.
   v) Have you seen other art like this?

2. Mini-lesson on Carlos Regazzoni
   a) Carlos Regazzoni was born on December 1, 1943, in Comodoro Rivadavia, in Chubut province. Regazzoni is known around the world for his paintings and sculptures made out of scrap metal materials. His collection has over three thousand sculptures of things like airplanes, horses and insects. Two enormous dinosaurs are installed in Patagonia. He also has many more large acrylic paintings and drawings in which he depicts landscapes, people and animals. Regazzoni has received recognition, sponsorship and awards for his vanguard contemporary art.
   b) Analyze Carlos Regazzoni's art. Questions to guide discussion:
      i) Describe what you see. Describe who you see.
      ii) How has the artist used line, shape, color, value, space and texture?
      iii) What materials has the artist used?
      iv) Interpret what the artist is telling you with his work.
      v) Have you seen other art like this?
3. Mini-lesson on what kids are doing at Escuela N° 23 in Villa Tesie, Buenos Aires: The students in 4th, 5th and 6th grade make Christmas trees, flowers, bags, and curtains out of plastic bottles, or sell them to a recycling company and use the profits to buy school supplies or pay for field trips.
4. Watch Terracycle video. Discuss what Terracycle is reusing and how it is doing it.
   Tom Szaky runs a company that takes trash from around the world and recycles into something new and useful. He makes functional art.
5. Class work/homework:
   a) Plan art piece.
   b) Find materials for reuse/recycling.

TECHNOLOGY TO BE USED

- Computers
- Projector

LESSON 4

TITLE / TOPIC: Recycled Art

DCPS VISUAL ARTS STANDARDS
- 4.1.1. Explore the significance and purpose of art.
- 4.1.3. Describe and analyze the elements of art, (e.g., line, color, shape, form, texture, space, and value) emphasizing form, as they appear in works of art.

OBJECTIVES (SWBAT)
- Recycle materials by turning them into art inspired by Carlos Regazzoni, Antonio Berni, or Tom Szaky.
- Recycle or reuse materials inspired by recycling at Escuela N° 23 in Villa Tesie, Buenos Aires.

ASSESSMENTS
- Reflection

ESSENTIAL QUESTION
- What are common impacts of trash and waste on the environment?
- How can we improve the environment?

MATERIALS REQUIRED
- Recyclable materials
- Art supplies
- Reflection rubric (attached)

INTRODUCTION
- See Lesson 3.

TASK BY TASK LEARNING ACTIVITIES
1. Students make works of art out of recyclable materials.
2. Upon completion, students write a reflection detailing what they made and why:
   a) What or who inspired your artwork?
   b) How did you use recyclable materials?
   c) How did you make recyclable materials into something new?

CLOSURE / WRAP-UP
- Students share their work of art and what inspired them to create it.

LESSON 5

TITLE / TOPIC: El Riachuelo and the Potomac

COMMON CORE ELA STANDARDS

- W.4.8. Recall relevant information from experiences or gather relevant information from print and digital sources; take notes and categorize information, and provide a list of sources.

DCPS SCIENCE STANDARDS

- 4.7.10. Investigate the Chesapeake Bay watershed and wetlands, and describe how they support a wide variety of plant and animal life that interact with other living and nonliving things.

OBJECTIVES (SWBAT)

- Demonstrate the distribution of Earth's water and name sources of fresh water on Earth.
- Discuss sources of pollution and demonstrate how pollution can be a threat to our water supply.

ASSESSMENTS

- Answers to response questions

ESSENTIAL QUESTION

- What are common impacts of trash and waste on the environment?
- How can we improve the environment?

MATERIALS REQUIRED

- Aluminum pans or boxes
- Spray bottles filled with water
- Large pieces of white paper
- Washable markers
- "Activity No. 1 - Earth's Water Distribution." http://www.epa.gov/reg5rcra/wptdiv/solidwaste/p2pages/pdfs/tb-water.pdf. EPA Water Pollution Prevention and Conservation, Pollution Prevention (P2) Education Toolbox - Tools for Helping Teachers Integrate P2 Concepts in the Classroom United States Environmental Protection Agency, EPA-905-F-97-011 August 1997.
- Video News Reports:
  - Conneen, Mark. "Potomac gets a D for pollution." http://www.tbd.com/articles/2011/11/potomac-gets-a-d-for-pollution-69033.html. News Channel 8. 10 November 2011. Web. 10 December 2011.
  - Mauro, Craig. "Argentines Fight to Save the Riachuelo River." http://www.youtube.com/watch?v=0cVvrpJ7tu8. YouTube. Uploaded by AlJazeera English on 29 March 2010. Web. 4 December 2011.

INTRODUCTION

- Clean water is important to life on Earth. Over time, people have polluted many of the Earth's rivers. Today we are going to investigate problems of and solutions for a river in Argentina, the Matanza River, known as El Riachuelo, which runs through Buenos Aires, and the Potomac River, which runs through Washington, DC.
- Demonstrate the distribution of Earth's water and name sources of fresh water on Earth using "Activity No. 1 - Earth's Water Distribution."
- After the demonstration, discuss water as a valuable resource.

TASK BY TASK LEARNING ACTIVITIES

1. Run-off experiment, adapted from: Carral. "Water Pollution." http://pan.intrasun.tcnj.edu/501/projects/Cruz/water_pollution.htm. Grant Elementary School, Trenton, NJ. n.d. Web. 10 December 2011.
   Have students follow your directions:
   a) Draw a blue line lengthwise down the middle of the paper (this represents a river).
   b) At the teacher's direction, draw medium sized dots up and down the sides of the river (brown for soil erosion, green for lawn and factory farm fertilizer, black for leaking car oil, yellow for salt from icy streets, red for trash [plastic bags, chip bags, paper, etc.], orange for hazardous waste, and purple for other things like waste water or detergents).
   c) Place the paper in a pan or box so that the sides are raised and the river is in a valley.
   d) Spray the top sides of the paper to represent rain.
   e) Observe what happens.
   f) Follow-up questions:
      i) What does the rain do?
      ii) How do the things running into the river affect plant life? Animal life?
2. Watch and take notes on a video about the Potomac.
3. Watch and take notes on a video about El Riachuelo.

CLOSURE / WRAP-UP

- Students respond to the following questions:
  a) Where does fresh water come from?
  b) How would conserving water and reducing pollution help our fresh water supply?
  c) How can we clean up El Riachuelo?
  d) How can we clean up the Potomac?

LESSON 6

TITLE / TOPIC: Service Learning Project

COMMON CORE ELA STANDARDS
- W.4.3. Write narratives to develop real or imagined experiences or events using effective technique, descriptive details, and clear event sequences.
- SL.4.4. Report on a topic or text, tell a story, or recount an experience in an organized manner, using appropriate facts and relevant, descriptive details to support main ideas or themes; speak clearly at an understandable pace.

DCPS SCIENCE STANDARDS
- 4.7.10. Investigate the Chesapeake Bay watershed and wetlands, and describe how they support a wide variety of plant and animal life that interact with other living and nonliving things.

OBJECTIVES (SWBAT)
- Participate in a service learning project.

ASSESSMENTS
- Reflection

ESSENTIAL QUESTION
- How can we improve the environment?

MATERIALS REQUIRED
- Reflection rubric (attached)
- Service learning project
  Note: choose and plan ahead for a service learning project in your community. I chose the River Habitat Program because it complements previous unit lessons on trash and river pollution.
- The Anacostia Watershed Society has a service learning program called The River Habitat Program. It is designed for elementary school children and focuses on animal adaptation and habitat needs in their environment. Students study the river, visit the river and participate in a service project, such as wetland restoration.
  Source: "River Habitat Program." http://www.anacostiaws.org/programs/education/river-habitat. Anacostia Watershed Society. n.d. Web. 10 December 2011.

INTRODUCTION
- So far we have learned about some of the ways that the Earth is polluted. Now we are going to focus on what we can do about it.

TASK BY TASK LEARNING ACTIVITIES

1. Students learn about the Chesapeake Bay Watershed and Anacostia River (a neighbor of the Potomac).
2. Students carry out a restoration project.

CLOSURE / WRAP-UP

- Teacher explains reflection requirements using rubric.
- Students write a reflection.

LESSON 7

TITLE / TOPIC: News Report (Video)

COMMON CORE ELA STANDARDS

- W.4.1. Write opinion pieces on topics or texts, supporting a point of view with reasons and information.
- W.4.3. Write narratives to develop real or imagined experiences or events using effective technique, descriptive details, and clear event sequences.
- SL.4.4. Report on a topic or text, tell a story, or recount an experience in an organized manner, using appropriate facts and relevant, descriptive details to support main ideas or themes; speak clearly at an understandable pace.

OBJECTIVES (SWBAT)

- Report on what you learned from the “Una Tierra” unit; share your news with a class in Argentina.

ASSESSMENTS

- News report presentation

ESSENTIAL QUESTION

- How can we improve the environment?

MATERIALS REQUIRED

- News Report Rubric (attached)
- Optional: pen pal relationship with a class in Argentina

INTRODUCTION

- In order to end our “Una Tierra” unit, we will create a news report to share with our friends, families, and pen pals in Argentina.

TASK BY TASK LEARNING ACTIVITIES

1. Students decide on which work sample to share in the culminating video news report. Students can work in pairs, groups or independently. Ideas for news reports include:
    - Describing maps and/or the geography of Argentina
    - Reporting on how much waste we make
    - Reviewing recycled art
    - Reporting on river pollution and/or fresh water distribution
    - The process and results of the service project
    - Our school recycling program
    - Other concerns about the environment in Washington, DC
2. Students write their news report script and plan background visuals based on the News Report Rubric
3. Adults video tape the news reports and compile them into an evening news report.

4. The news reports will be shared with our pen pal school in Argentina through the Internet or mail.

TECHNOLOGY TO BE USED

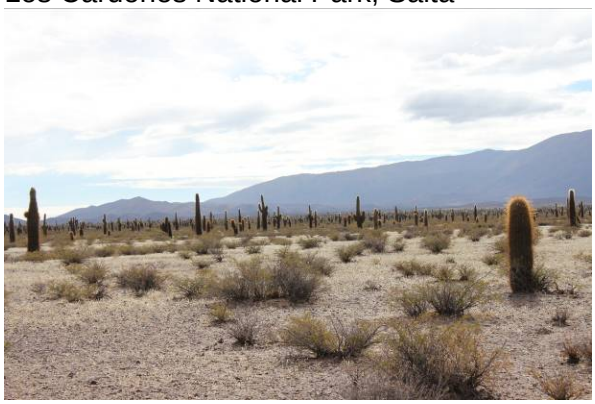
- Video camera(s)
- Computer with video editing software

CLOSURE / WRAP-UP

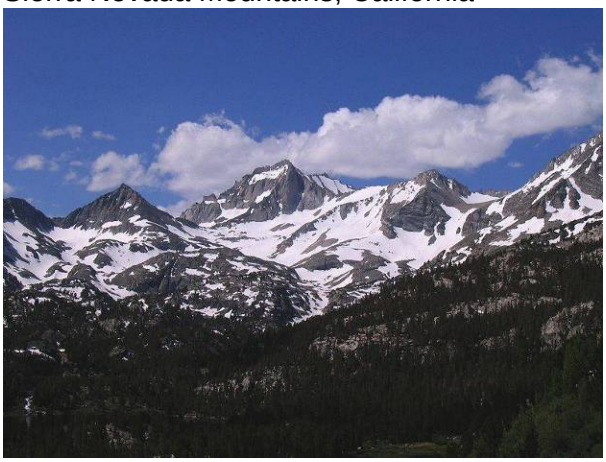
- The class will screen the news reports.

LESSON 1: Categorize photos of American landscapes and Argentine landscapes

Cut out the photos below and have students sort them as American or Argentine landscapes.

U.S.	**Argentina**
Washington monument, Washington, DC (Built to commemorate the first U.S. president, General George Washington) 	The Obelisk of Buenos Aires, Buenos Aires (Built to commemorate the four hundredth anniversary of the first founding of the city) 
Niagara Falls, New York  http://www.wanderplanet.com/niagara-falls-travel-vacation-hotel-reservations/	Iguazú Falls 
Sonoran Desert National Monument, Arizona  http://www.thedailygreen.com/cm/thedailygreen/images/5J/sonoran-desert-lg.jpg	Los Cardones National Park, Salta 

Sierra Nevada Mountains, California



http://friscophoto.wordpress.com/2008/07/01/sierra-nevada-mountains-cascades/

Andes

Santa Barbara Winery Lafond Winery and Vineyards

http://www.lafondwinery.com/wineweblog/wine-news/winter-in-the-vineyard-view-of-pinot-noir-block-and-entrance-to-the-winery-from-picnic-area/

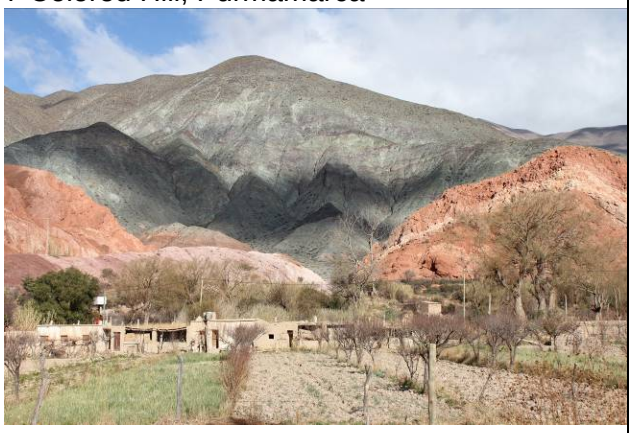
Vineyards, Mendoza

Alaskan Glaciers

http://brenthiggs.files.wordpress.com/2008/10/glacier.jpg

Parque Nacional Los Glaciares, Glaciar Perito Moreno

http://www.argentina.travel/en/destino/Patagonia

Bell Rock, Sedona, Arizona	7 Colored Hill, Purmamarca
 Tomas Castelazo: http://commons.wikimedia.org/wiki/File:Bell_rock_sedona_arizona.jpg	

LESSON 1: Geography in Argentina

Use the "Argentina Invites You" brochure to answer the following questions about your assigned regions.

Buenos Aires

1. Which provinces make up the Buenos Aires region?
2. What is the mean temperature in June?
3. What is the mean temperature in December?
4. How many national parks are in Buenos Aires?
5. Using the map references key, list the activities available in the region.
6. Use the photographs and description to summarize what can be seen in the Buenos Aires region.

Norte

1. Which provinces make up the Norte region?
2. What is the mean temperature of Jujuy in June?
3. What is the mean temperature of Jujuy in December?
4. How many national parks are in Norte?
5. Using the map references key, list the activities available in the region.
6. Use the photographs and description to summarize what can be seen in the Norte region.

Cuyo

1. Which provinces make up the Cuyo region?
2. What is the mean temperature of Mendoza in June?
3. What is the mean temperature of Mendoza in December?
4. How many national parks are in Cuyo?
5. Using the map references key, list the activities available in the region.
6. Use the photographs and description to summarize what can be seen in the Cuyo region.

Litoral

1. Which provinces make up the Litoral region?
2. What is the mean temperature of Puerto Iguazú in June?
3. What is the mean temperature of Puerto Iguazú in December?
4. How many national parks are in Litoral?
5. Using the map references key, list the activities available in the region.
6. Use the photographs and description to summarize what can be seen in the Litoral region.

Córdoba

1. Which provinces make up the Córdoba region?
2. What is the mean temperature of Córdoba in June?
3. What is the mean temperature of Córdoba in December?
4. How many national parks are in Córdoba?
5. Using the map references key, list the activities available in the region.
6. Use the photographs and description to summarize what can be seen in the Córdoba.

Patagonia

1. Which provinces make up the Patagonia region?
2. What is the mean temperature of Tierra del Fuego in June?
3. What is the mean temperature of Tierra del Fuego in December?
4. How many national parks are in Patagonia?
5. Using the map references key, list the activities available in the region.
6. Use the photographs and description to summarize what can be seen in the Patagonia.

LESSON 1: Geography in Argentina

Answers are in red.

Buenos Aires

1. Which provinces make up the Buenos Aires region? (Ciudad de Buenos Aires and Provincia de Buenos Aires)
2. What is the mean temperature in June? (53 degrees Fahrenheit)
3. What is the mean temperature in December? (74 degrees Fahrenheit)
4. How many national parks are in Buenos Aires? (0)
5. Using the map references key, list the activities available in the region. (beaches, hot springs, fly fishing, devotional sites, farm vacations, golf, train rides)
6. Use the photographs and description to summarize what can be seen in the Buenos Aires region. (Answers will vary.)

Norte

1. Which provinces make up the Norte region? (Jujuy, Salta, Catamarca, Tucuman, Santiago del Estero)
2. What is the mean temperature of Jujuy in June? (66 degrees Fahrenheit)
3. What is the mean temperature of Jujuy in December? (71 degrees Fahrenheit)
4. How many national parks are in Norte? (6)
5. Using the map references key, list the activities available in the region. (hot springs, devotional sites, farm vacations, golf, train rides, archeological sites)
6. Use the photographs and description to summarize what can be seen in the Norte region. (Answers will vary.)

Cuyo

1. Which provinces make up the Cuyo region? (La Rioja, San Juan, Mendoza, San Luis)
2. What is the mean temperature of Mendoza in June? (49 degrees Fahrenheit)
3. What is the mean temperature of Mendoza in December? (73 degrees Fahrenheit)
4. How many national parks are in Cuyo? (4)
5. Using the map references key, list the activities available in the region. (hot springs, farm vacations, golf, rock art, canoeing, skiing, mountaineering)
6. Use the photographs and description to summarize what can be seen in the Cuyo region. (Answers will vary.)

Litoral

1. Which provinces make up the Litoral region? (Missiones, Corrientes, Entre Rios, Formosa, Chaco, Santa Fe)
2. What is the mean temperature of Puerto Iguazú in June? (61 degrees Fahrenheit)

3. What is the mean temperature of Puerto Iguazú in December? (77 degrees Fahrenheit)
4. How many national parks are in Litoral? (6)
5. Using the map references key, list the activities available in the region. (hot springs, farm vacations, fly fishing, devotional sites, golf, ruins, train rides)
6. Use the photographs and description to summarize what can be seen in the Litoral region. (Answers will vary.)

Córdoba

1. Which provinces make up the Córdoba region? (Córdoba)
2. What is the mean temperature of Córdoba in June? (54 degrees Fahrenheit)
3. What is the mean temperature of Córdoba in December? (75 degrees Fahrenheit)
4. How many national parks are in Córdoba? (1)
5. Using the map references key, list the activities available in the region. (hot springs, farm vacations, golf, train rides, archeological site)
6. Use the photographs and description to summarize what can be seen in the Córdoba. (Answers will vary.)

Patagonia

1. Which provinces make up the Patagonia region? (La Pampa, Neuquen, Rio Negro, Chubut, Santa Cruz, Tierra del Fuego)
2. What is the mean temperature of Tierra del Fuego in June? (35 degrees Fahrenheit)
3. What is the mean temperature of Tierra del Fuego in December? (50 degrees Fahrenheit)
4. How many national parks are in Patagonia? (11)
5. Using the map references key, list the activities available in the region. (hot springs, farm vacations, golf, train rides, rock art, skiing, mountaineering, skin diving, fly fishing, beaches, penguin colony, whale sighting, seal lion colony)
6. Use the photographs and description to summarize what can be seen in the Patagonia. (Answers will vary.)

Name _____ Date_____

LESSON 2

How Much Waste Do We Make?: U.S.

Calculate the answers to the questions below.

The average person in the United States produces 5 pounds (lbs) of trash per day.

7 days = 1 week
4 weeks = 1 month
12 months = 1 year
One ton = 2,000 lbs

1. How many pounds of trash does one person make per day? _____
2. How many pounds per week? _____
3. How many pounds per month? _____
4. How many pounds per year? _____
5. Does one person throw away more than a ton of trash in a year? _____
6. *If one person threw away one less pound of trash per day, how much less trash would end up landfills in one year? _____
7. Make a poster that explains your data to other students at our school. You may draw pictures, use words or choose another way to clearly explain your answers to questions 1–4.

Name _____ Date_____

LESSON 2

How Much Waste Do We Make?: Washington, DC

Calculate the answers to the questions below.

The average person in the United States produces 5 pounds (lbs) of trash per day.

There are 601,723 residents of Washington, DC (Washingtonians).

7 days = 1 week
4 weeks = 1 month
12 months = 1 year
One ton = 2,000 lbs

1. How many pounds of trash do **Washingtonians** make per day?
   _____
2. How many pounds per week? _____
3. How many pounds per month? _____
4. How many pounds per year? _____
5. Convert the annual number from pounds into tons. How many tons of trash do Washingtonians make each year? _____
6. *If every person threw away one less pound of trash per day, how much less trash would end up in D.C.'s landfills per year? _____
7. Make a poster that explains your data to other students at our school. You may draw pictures, use words or choose another way to clearly explain your answers to questions 1–5.

Name _____ Date_____

LESSON 2

How Much Waste Do We Make?: John Eaton Elementary School

Calculate the answers to the questions below.

On Wednesday, October 18, 2011, school lunch at John Eaton (foam tray, plastic ware, lasagna, carrots, a carton of milk and fruit in a plastic cup) weighed approximately 1.5 lbs.

Let's say that the average student throws away 2/3 of their food/containers. That means that each student throws away about 1 pound of their lunch per day.

7 days = 1 week
4 weeks = 1 month
12 months = 1 year
One ton = 2,000 lbs

1. How many pounds of lunch trash does one student throw away per day?
   _____
2. How many pounds per week? _____
3. How many pounds per month? _____
4. How many pounds per year? _____
5. At Eaton, if there are 120 students who eat school lunch, how many pounds of food trash do they throw away per year?
   _____
6. Convert the annual number from pounds into tons. How many tons of lunch trash do John Eaton students make each year? _____
7. About how much trash do you throw away at lunchtime? _____
8. Make a poster that explains your data to other students at John Eaton. You may draw pictures, use words or choose another way to clearly explain your answers to questions 1–6.

Name _____ Date_____

LESSON 2

How Much Waste Do We Make?: Buenos Aires

Calculate the answers to the questions below.

The average person in Buenos Aires produces 4 pounds (lbs) of trash a day.

There are 2,891,082 residents of Buenos Aires (Porteños).

7 days = 1 week
4 weeks = 1 month
12 months = 1 year
One ton = 2,000 lbs

1. How many pounds of trash do **Porteños** make per day?
   _____
2. How many pounds per week? _____
3. How many pounds per month? _____
4. How many pounds per year? _____
5. Convert the annual number from pounds into tons. How many tons of trash do Porteños make each year? _____
6. *If every person threw away one less pound of trash per day, <u>how much less</u> trash would end up in Buenos Aires' landfills per year?
   _____
7. Make a poster that explains your data to other students at John Eaton. You may draw pictures, use words or choose another way to clearly explain your answers to questions 1–5.

LESSON 2

How Much Waste Do We Make?

Poster Rubric

Category	4	3	2	1
Knowledge Gained	Student can accurately answer all questions related to facts in the poster and processes used to create the poster.	Student can accurately answer most questions related to facts in the poster and processes used to create the poster.	Student can accurately answer about 75% of questions related to facts in the poster and processes used to create the poster.	Student appears to have insufficient knowledge about the facts or processes used in the poster.
Graphics - Relevance	All graphics are related to the topic and make it easier to understand. All borrowed graphics have a source citation.	All graphics are related to the topic and most make it easier to understand. All borrowed graphics have a source citation.	All graphics relate to the topic. Most borrowed graphics have a source citation.	Graphics do not relate to the topic OR several borrowed graphics do not have a source citation.
Labels	All items of importance on the poster are clearly labeled with labels that can be read from at least 3 ft. away.	Almost all items of importance on the poster are clearly labeled with labels that can be read from at least 3 ft. away.	Several items of importance on the poster are clearly labeled with labels that can be read from at least 3 ft. away.	Labels are too small to view OR no important items were labeled.
Mechanics	Capitalization and punctuation are correct throughout the poster.	There is 1 error in capitalization or punctuation.	There are 2 errors in capitalization or punctuation.	There are more than 2 errors in capitalization or punctuation.

LESSON 4

Recycled Art

Reflection Rubric

Category	4	3	2	1
Information	All questions are answered with at least 3 sentences about each.	All questions are answered with at least 2 sentences about each.	Most questions are answered with 1 sentence about each.	Two or more questions were not addressed.

LESSON 6

Service Learning Project

Reflection Rubric

Category	4	3	2	1
Description of Service Learning Experience	There is a clear topic. Relevant, telling, quality details give the reader important information that goes beyond the obvious or predictable.	There is a clear topic. Supporting details and information are relevant.	There is a somewhat clear topic. Supporting details and information are relevant, but several key details are missing.	The topic is not clear. Supporting details and information are typically unclear or not related to the topic.
Global and Local Connection	The topic's significance for personal, local and global contexts is explained in multiple ways.	The topic's significance for personal, local and global contexts is explained.	The topic's personal, local and global significance is not explained for each context.	There is a seemingly random collection of information
Includes Indication of Future Actions	A clear plan for future personal or collaborative action is identified. The plan has potential for significant positive impact and shows empathy for others.	A clear plan for future personal or collaborative action is identified. The plan has potential for positive impact and shows empathy for others.	A somewhat clear plan for future personal or collaborative action is identified. The plan has limited potential for positive impact and may not show empathy for others.	A clear plan is not identified. The plan does not have potential for positive impact.

LESSON 7

News Report

News Report Rubric

Category	4	3	2	1
Topic	There is a clear, detailed topic.	There is a clear topic.	There is a somewhat clear topic.	There is not a clear topic.
Accuracy of Facts	All supportive facts are reported accurately (3 of 3).	Almost all facts are reported accurately (2 of 3).	One fact is reported accurately.	No facts are reported accurately or no facts were reported.
Visuals and Background	Visuals and background are clearly related to the material being presented.	Visuals and background are related to the material being presented.	Visuals and background are somewhat related to the material being presented.	Visuals and background are not related to the material being presented.
Speaks Clearly	Speaks clearly and distinctly all of the time and mispronounces no words.	Speaks clearly and distinctly all of the time but mispronounces 1 or 2 words.	Speaks somewhat clearly and/or mispronounces 2 or more words.	Does not speak clearly and/or mispronounces more than 2 words.
Duration	The news report was between 1.5 and 3 minutes and did not seem hurried or too slow.	The news report was between 1.5 and 3 minutes but seemed slightly hurried or too slow.	The newscast was between 1.5 and 3 minutes but seemed hurried or too slow.	The newscast was too long or too short.

ADDITIONAL RESOURCES:

LESSON 1

- Nickles, Greg. *Argentina: the land.* New York: Crabtree Publishing Company, 2001. Print.
- Argentina Instituto Nacional de Promoción Tourística. http://www.argentina.travel/en
- Embassy of Argentina in Washington, DC. http://www.embassyofargentina.us/v2011/en/home.htm, n.d. Web. 10 December 2011.
- Interactive map of Argentina: "Argentina Map." http://travel.nationalgeographic.com/travel/countries/argentina-map/. National Geographic, n.d. Web. 27 November 2011.
- Photos from around Argentina: "Argentina Photos." http://travel.nationalgeographic.com/travel/countries/argentina-photos/. National Geographic, n.d. Web. 27 November 2011.

LESSON 2

- "The Quest for Less: Activities and Resources for Teaching K-8." http://www.epa.gov/osw/education/quest/quest.htm. U.S. Environmental Protection Agency. 20 September 2011. Web. 27 November 2011.
- Robinson, Kristie, "Fact of the Week #02: Rubbish." http://www.argentinaindependent.com/environment-blog/fact-of-the-week-02-rubbish-/. The Argentina Independent. 28 June 2011. Web. 28 November 2011.
- Cartoceti, Cecilia. "Dirty Ecology: Ceamse in Zavaleta." http://www.argentinaindependent.com/currentaffairs/newsfromargentina/dirty-ecology-ceamse-in-zavaleta-/. The Argentina Independent. 01 June 2011. Web. 28 November 2011
- Articles about cartoneros:
  - Hill Nicole. "Backstory: Lives recycled in Argentina." http://www.csmonitor.com/2006/0125/p20s01-woam.html. The Christian Science Monitor. 25 January 2011. Web. 28 November 2011.
  - Steinecke, Julia. "The Other Nightlife in Buenos Aires: The Story of Argentina's Cartoneros." http://www.vergemagazine.com/off-the-beaten-track/the-other-nightlife-in-buenos-aires-the-story-of-argentina-s-cartoneros.html. Verge Magazine. n.d. Web. 28 November 2011.
  - Gold, Hadas. "The Cooperative." http://pulitzercenter.org/articles/argentina-cartoneros-waste-pickers-economy-government-recognition. Pulitzer Center on Crisis Reporting. 1 August 2011. Web. 28 November 2011.
  - Bo, Theresa. "Recycling for life in Argentina." http://www.aljazeera.com/news/americas/2007/04/200852513195758178 5.html. Al Jazeera. 27 April 2007. Web. 28 November 2011.
  - Edgerton, Anna. "Street Recyclers Resist Green Initiatives." http://www.jofr.org/tag/green-initiatives/#.TyhoZOCSeXw. Journal of Foreign Relations. 22 September 2001. Web. 28 November 2011.

LESSON 5

- "What On Earth Do You Know About Water? http://www.epa.gov/gmpo/edresources/water_5.html. U. S. Dept of Agriculture, Natural Resources Conservation Service. 24 February 2011. Web. 28 November 2011.
- How to Clean Up Our Water http://www.nrdc.org/water/pollution/gsteps.asp. Natural Resources Defense Council. 11 April 2001. Web. 28 November 2011.
- Articles about the Potomac:
  - Fahrenthold David A. "Study: Development Worsening Pollution of Potomac." http://www.washingtonpost.com/wp-dyn/content/article/2008/11/11/AR2008111101148.html. 11 November 2008. Web. 28 November 2011.
  - "Our River." http://www.potomacriverkeeper.org/our-river. Potomac Riverkeeper. n.d. Web. 28 November 2011.
- Articles about El Riachuelo:
  - "Slow clean up for Argentina's worst environmental stain." http://coastalcare.org/2011/05/slow-clean-up-for-argentinas-worst-environmental-stain/. Coastal Care. n.d. Web. 28 November 2011.
  - "El Riachuelo, Buenos Aires, Argentina." http://www.newhavenleon.org/yahoo_site_admin/assets/docs/El_Riachuelo.22271646.pdf. New Haven/León Sister City Project. n.d. Web. 28 November 2011.
  - Valente, Marcela. "A Roadmap Against Pollution." http://www.tierramerica.info/nota.php?lang=eng&idnews=502. Tierramérica. n.d. Web. 28 November 2011.
  - Hoshaw, Lindsey. "Troubled Waters: the Matanza-Riachuelo river basin." http://www.blacksmithinstitute.org/articles/file/The+Argentimes+Matanza-Riachuelo+river+basin.pdf. The Blacksmith Institute. 23 May 2008. Web. 28 November 2011.
- Articles on water pollution:
  - Woodford, Chris. "Water pollution: an introduction." http://www.explainthatstuff.com/waterpollution.html. Explain That Stuff! 26 August 2001. Web. 28 November 2011.
  - "Water Pollution." http://www.encyclopedia.com/topic/water_pollution.aspx. West's Encyclopedia of American Law. 2005. Web. 28 November 2011.