Earth Awareness

Natalie Aschenbrenner’s 5th Grade Class: 24 students

Theme
I picked earth awareness as a theme because fifth graders will learn about multiculturalism as they study the earth as a diverse planet. Also, students will learn of environmental factors, such as pollution, and how these factors effect the world’s population. In addition, students will be taught ways to celebrate diversity and promote a clean environment.

Book:
If the World Were a Village written by David J. Smith and published by Kids Can Press, 2002

Other Resources:
http://www.enchantedlearning.com/crafts/globe/ (papier-mâché globes)
http://www.enchantedlearning.com/crafts/earthday/glue/ (earth pendant craft)
Mrs. Knoll from Niles Community Schools (suitcase survival activity)

Additional activities were created by Natalie Aschenbrenner.

Academic Standards:
5.2.9 Demonstrate civic responsibility in group and individual actions, including civic dispositions—such as civility, cooperation, respect, and responsible participation.

5.6.1 Explain which types of displays (bar, pie, and line graphs) are appropriate for various sets of data.

5.3.1 Demonstrate that lines of latitude and longitude are measured in degrees of a circle, that places can be precisely located where these lines intersect, and that location can be stated in terms of degrees north or south of the equator and east or west of the prime meridian.

5.5.1 Describe the basic needs that individuals have in order to survive—such as the need for food, water, shelter, and safety—and give examples of how people in early America adapted to meet basic needs.

5.7.4 Select a focus, organizational structure, and point of view for an oral presentation.

5.1.4 Interpret percents as a part of a hundred. Find decimal and percent equivalents for common fractions and explain why they represent the same value.
Objectives/Goals:
1. Students will demonstrate civic responsibility while working on a food drive committee.
2. Students will choose an appropriate graph to display facts from the book *If the World Were a Village*.
3. Students will identify a country’s location using lines of longitude and latitude.
4. Students will list 12 items they need to survive on a deserted island.
5. Students will organize an oral presentation on their selected country.
6. Students will write percentages as part of 100 when creating a timeline for the past and future village. (See activity below.)

Activities:

Day 1:
* Each group of 3 students will have a book to follow along with and use for activities.
* For this activity groups will be prearranged by the teacher using the student’s ability level in math.
* Read 1st page, “Welcome to the global village” (1st three paragraphs)
* Have students close their eyes and picture a village with 100 people in it. Tell the students that this village is going to represent the world’s population.
* Read the last paragraph describing the setting of the village.
* (Students open their eyes.) Read aloud to the students the rest of the book as they follow along in their group’s book.
* Have students in groups of three make a pie graph, bar graph, and line graph to display the information presented on their group’s assigned page. (Page will be assigned by the teacher in accordance with the group’s math level.)
* Have each group choose a graph from their three graphs to present to the class. They are to present the graph as one that best illustrates the information. Also, they will explain why they think it illustrates the information better than the other two.
* As a class have a grand discussion about the information presented after each group presents their graph. Discuss the type of graph they picked and the information presented.

Day 2:
* Reread the pages about nationalities and languages in the book *If the World Were a Village*.
* Ask students to brainstorm what diversity means.
* Have students get into groups of 3 to share their ideas. (student choice groups)
* Teacher defines diversity for the class.
* Give each group a poster board, glue, magazines, and scissors.
* Student groups will make a collage of things displaying the world’s diversity with cut out magazine pictures and words.

Day 3:
* Refer to the students’ graphs which display the proportions of food in the village. These were made on the 1st day of the unit. Have students
brainstorm why some people enjoy food surplus and some people suffer food shortage.

* Have students divide into groups of 3 and share their thoughts. (Student choice groups)
* Announce to the class they are going to hold a food drive from which they will donate the collected food to a local homeless shelter.
* Have students sign up for different committees for the food drive.
* Committees include:
  1. Advertisement (producing and publicizing)
  2. Labeling collection boxes and distributing them
  3. Retrieving collected food
  4. Transporting food to shelter with teacher (loading and unloading of food)

(This project will continue throughout the unit)

Day 4:
* Students will choose from a list of countries to do an oral presentation on.
* Students will go to the library to collect information from various sources.
* Their oral presentation must include the topics of the theme book *If the World Were a Village*. These topics include the country’s nationality, languages, religions, food, air and water supply, schooling and literacy, wealth, and electricity.
* Presentations will be given at the end of the unit.
* Advertising food drive committee meets with the teacher.

Day 5:
* Students will make papier-mâché globes from balloons, newspaper, flour, and water.
* After they dry, have students apply map printouts of the western and eastern hemispheres to their globe and then paint them.
* Once globes are dry, students will label them with a black marker the equator, prime meridian, North Pole, South Pole, Tropic of Cancer, and Tropic of Capricorn. Then with a pencil they will add lines of latitude and longitude.
* Food drive collection box committee meets with the teacher.

Day 6:
* Put on a bulletin board a large map of the United States with lines of latitude and longitude. Then have the class work together to locate a place each student has traveled to using the latitude and longitude degrees. Students will mark the place they traveled to with an individualized star.
* In groups of 4, students will locate countries on a globe using the lines of latitude and longitude. (Teacher prearranged mixed ability groups)

Day 7:
* Each student will receive a handout of a white suitcase. Inside the suitcase students will list or draw 12 items they would take to survive on a deserted island.
* Then students will get in groups of four to discuss their choices of supplies. As a group they will make one suitcase of 12 items they all agree are necessary for survival. (Groups will be prearranged mixed ability groups.)
* Next each group will be given a different type of climate on their deserted island. Groups will then have an opportunity to change their choice of supplies.
* Then each group will present their suitcase to the classroom and explain why they picked their twelve items. The class will then have a chance to ask questions and give opinions about the group’s choice of supplies.

Day 8:
* Using the book’s pages referring to the “village in the past” and “village of the future” explain to students the timeline. Explain to the students that 1 village is 1% of the 100 villagers. Show them that 1/100 = 1%
  - example: 1 villager in a village of 100 people equals 1/100 or 1% or .01 (when divided)
  200 villagers predicted for the year 2050 would be calculated as 200/100 or 200% or 2.0 (when divided)
* Have students rewrite the timeline (given in the book) with fractions, percentages, and decimals of villagers for each date and have them continue the timeline with the book’s statistics given for the future.
* Struggling students will work in a small group with the teacher or teacher aide.
* Retrieving food drive food committee meets with the teacher.

Day 9:
* Oral presentations on countries will be given by students.
* After each presentation there will be a question and answer session.
* Transporting food for food drive committee meets with teacher.

Day 10:
* Earth Day celebration!
* Students will go to the computer lab and fill out a worksheet about the history of Earth Day using the internet.
* Trash pick-up race on the playground. Students will have fifteen minutes to pick-up as much trash as they can. Each person’s bag of collected trash will be weighed and whoever has the heaviest bag wins.
* Plant a tree as a class.
* Students will have each brought in a different multicultural snack to share.
* Craft: Using glue, template of the earth (students color it), waxed paper, string, and paperclips, students will make an earth pendant or earth window sticker.
* Food is transferred to homeless shelter by the teacher and the transporting food committee. (This will probably take place during recess or after school depending on how excited the committee is about delivering the food.)
**Time Schedule:**

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<tbody>
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<td><strong>1st Day:</strong></td>
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<td><strong>3rd Day:</strong></td>
<td><strong>4th Day:</strong></td>
<td><strong>5th Day:</strong></td>
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<tr>
<td>- Read book</td>
<td>- Reread “Nationalities” and “Languages”</td>
<td>- Refer to food graphs</td>
<td>- Students pick country for their oral presentation</td>
<td>- Papier-mâché globes</td>
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<td>- Groups make graphs</td>
<td>- Groups make diversity collages</td>
<td>- Homeless Shelter food drive committees organized</td>
<td>- Library: Research countries</td>
<td>- Collection box committee meets with teacher</td>
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<td><strong>6th Day:</strong></td>
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<td>- Longitude and latitude bulletin board with students travels</td>
<td>- Survival suitcase activity</td>
<td>- Past and Future Village timeline</td>
<td>- Oral presentations on countries given with question and answer sessions</td>
<td>- Earth Day Celebration</td>
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<td>- Groups find longitude and latitudes for countries</td>
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<td>-Retrieving food group meets with teacher</td>
<td>- Transporting food committee meets with teacher</td>
<td>- Computer lab: History of Earth Day worksheet</td>
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<td>- Library: Extra time for country research</td>
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<td>- Trash pick-up race</td>
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<td>- Plant a tree as a class</td>
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<td>- Craft: earth pendants/ window sticker</td>
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<td></td>
<td>- Eat multicultural food</td>
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<td>- Food delivered to homeless shelter.</td>
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**Grouping:**

I will use ability groups for activities in which students need to work with other students at the same level, like the graphing activity. This way these students can be challenged according to their ability.

Mixed ability groups will be used when capable students can help without stress and difficulty less able students. Activities which do not directly relate to math or reading, like the suitcase survival worksheet, are good for mixed ability groups because they are simpler and easier to provide assistance in.

Activities done as a class will be used when I am trying to teach the class a lesson and want to create class community. These activities will be general enough for everyone to participate in, like the food drive and tree planting activities.

Individual student work will be given so students can learn to use their own knowledge and skills without relying on others to do the work. Also, I will give individual work when I want to assess a student’s knowledge or ability, such as the oral presentations.

**Checklist:**

(Attached)
Bloom’s Taxonomy:
1) Knowledge:
   What is the word diversity mean?

2) Comprehension:
   Describe what your group’s graph is displaying about the village.

3) Application:
   How can you help people who do not have enough food to eat?

4) Analysis:
   Explain to me why any number over 100 is the same number written as a percentage.

5) Synthesis:
   What if the author’s predictions are correct about the world’s future population in the book *If the World Were a Village?* What will living on the Earth be like in the far future?

6) Evaluation:
   Pick the graph which appropriately displays the information from *If the World Were a Village*. Why does the graph your group picked provide a better display of the information than the other graphs?
Earth Awareness Unit Checklist

Check items with an X when you have completed and handed them in or when you have finished participating in them.

- Made 3 Graphs of facts from *If the World Were a Village* with student’s group:
  - Pie graph ____________
  - Line graph _________
  - Bar graph ____________

- Group diversity collage:________

- Participated in food drive committee __________ Committee name:____________

- Attended food drive committee meeting with the teacher ______

- Oral presentation of a country ______________ Country chosen:____________________

- Locating countries with longitude and latitude worksheet____________

- Survival suitcase worksheet__________

- Past and future village timeline________

- Earth Day history worksheet________

- Participated in Earth Day activities:
  - Trash pick-up race ______
  - Class tree planting ______
  - Earth pendant/window sticker craft ______