Creating Community:
Roxaboxen reminds us that even at their most imaginative, children create coherent worlds of friendship, of stability, and of community. Our schools can be those places of community where children feel safe and nurtured as they learn.

Dr. Marilyn Howard
State Superintendent of Public Instruction

1. Visualization [language arts]
“Years later, Marian’s children listened to stories of that place and fell asleep dreaming dreams of Roxaboxen.”

2. Characterization [science]
“There across the road, it looked like any rocky hill – nothing but sand and rocks…”

3. Organization [social studies]
“A town of Roxaboxen began to grow, traced in lines of stone: Main Street First, …”

4. Investigation [math]
“When Marian dug up a tin box filled with round black pebbles everyone knew what it was: it was buried treasure.”

5. Creation [humanities]
“At first the houses were very plain, but soon they all began to add more rooms. The old wooden boxes could be shelves or tables…”

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1. Visualization: Reading

*Roxaboxen*
Written by Alice McLerran
Illustrated by Barbara Cooney

**Grade:** Three

**Purpose:** Broaden student’s understanding of community

**Objectives:** Students will be able to do the following:
- Demonstrate understanding of newly-introduced vocabulary words
- Expand their knowledge of figurative language
- Retell the story with 90% accuracy

**Idaho Achievement Language Arts Standards (Grade 3):**
698.01 Read a variety of traditional and electronic materials for information and understanding.

**Content Knowledge and Skills**
698.01i: Use knowledge of root words to determine meaning of unknown words within a range
698.01k: Before, during and after reading locate information to clarify text structure.
698.01m: Paraphrase and summarize text.
698.01o: Identify language and literary devices: mood; tone; style; figurative language; format.
698.01p: Determine main idea within a text and identify relevant details and facts.

**Materials/Resources:**
- Book: *Roxaboxen*
- Word web
- List of vocabulary words selected from the story
- Who, what, when, where, why cards for each child

**Activities for Pre-Reading**

**Vocabulary Lessons**

**History of the English Language**

English has a rich history. Many of our words come from other languages. An example is the word community. *Roxaboxen* is a community created by children. The word community comes from the French. The word part *com*, comes from the French word *comme*, which means to eat-unity meaning together. So community actually translates into eating together. Other related
words would be companion, or company. The French word for bread is pan. So those words – literally translate into “A person, or people you would break bread with.”

Additional Vocabulary Activities

You may want introduce a few vocabulary words that the children are unfamiliar with before reading the story. Attached is a blank word web for your use. Feel free to adapt it whatever way works for your students. Also attached is a sample web for the word ocotillo. That web includes the definition, characteristics, derivation, part of speech and the sentence from the story.

Other words you may want to web with your students:

- greasewood
- edged
- pottery
- amethyst
- ford
- whirling
- raids
- whooping

Introduction of Figurative Language

Another idea would be to use Roxaboxen to explain the concept of a simile. A simile is a comparison that uses like or as. For example “The street between Roxaboxen and the houses curved like a river, so Marian named it the River Rhode.

Another example is “But ah, if you had a horse, you could go as fast as the wind.”

You may want to teach students that if they remove like or as then they have a metaphor. For example, the simile “The street between Roxaboxen and the houses curved like a river” could become “The street between Roxaboxen and the houses was a river.” A good book to try this with is the picture book Quick as a Cricket.

Activities for During Reading

Duplicate copies of the cue cards (who, when, where, what, why) for each child. Have the children cut them out and lay them in order on the left side of their desk. While they listen to the story, have the child move the card to the right side of the desk one at a time.

Summary Activities

Re-telling- Using their cue cards have students verbalize the story to a partner, or they can use their cue cards to draw a picture that summarizes the story. The picture shows who, what, when, where and why.
1. Visualization: Language Arts

*Roxaboxen*
Written by Alice McLerran and
Illustrated by Barbara Cooney

**Grade:** Three

**Purpose:** Broaden students’ understanding of community

**Objectives:** Students will be able to do the following:
- Demonstrate understanding of newly-introduced vocabulary words
- Use word recognition skills and knowledge of types of syllables, decode a word list

**Idaho Achievement Language Arts Standards (Grade 3):**

- **698.01** Read a variety of traditional and electronic materials for information and understanding.
  - **Content Knowledge and Skills**
    - 698.01b: Employ multiple strategies to identify words using spelling patterns and syllabication.
    - 698.01c: Use phonics cues to automatically decode words and cueing strategies to fluently read third grade text.

- **698.02** Read and respond to a variety of literature to compare and contrast the many dimensions of human experience.
  - **Content Knowledge and Skills**
    - 698.02b: Evaluate new information and relate to known information and ideas.
    - 698.02f: Determine main idea of text and identify relevant and supporting details and facts; arrange in chronological order.

- **699.01** Understand and use the writing process.
  - **Content Knowledge and Skills**
    - 699.01b: Legibly write in a variety of formats to record, generate, and reflect upon ideas.

- **700.01** Listen for information and understanding.
  - **Content Knowledge and Skills**
    - 700.01a: Listen and respond to a variety of electronic and live presentations.

- **701.01** Speak to share understanding of information.
  - **Content Knowledge and Skills**
    - 701.01a: Plan and deliver an oral presentation that incorporates appropriate grammar and vocabulary as well as effective use of illustrations, pictures, and charts.

**Materials/Resources:**
Book: *Roxaboxen*
Slides of book, *Roxaboxen* (Optional)
Blue construction paper
Color chalk
Vocabulary list of words and definitions on tag board strips with attached magnets
Word List for decoding on chalkboard

Procedure for Teaching:

Display a large picture of the *Roxaboxen* book cover. Invite students to decode its title. Invite them to speculate about the meaning of the word “Roxaboxen.” Then explain that “Roxaboxen” is actually the name of a community that some children created nearly 100 years ago in Yuma, Arizona. (Direct them to a large map of Arizona and the city of Yuma. Show its relation to the town in Idaho in which you are living. [Social Studies standard 426.01b: Find the United States, Idaho, the state capital Boise, and own community on a map.]) Ask the children to tell you the name of the author of the book and the name of the person who illustrated the story.

Briefly define for the children the word “community” as “a group of people who live in a particular location and who serve each other in many ways.”

Instruct the children, “Before I present the story of Roxaboxen to you, I want you to think about the community in which you are living right now.” Ask: “What are some ways in which people in our community serve each other?” Provide opportunities for several to share and suggest several.

Direct the children to close their eyes and imagine what they would envision as an ideal community. Ask the following:

1. Who would live in a community that you would create? [Social Studies standard 420.01d: Explain how communities are linked together through media, technology, phones, radio, etc.]
2. Who does not live in your community?
3. What kinds of rules do you think would be important for your community?
4. Can you think of some rules we have in our community that you may not want or even need for your community? [Social Studies standard 423.01c: Identify reasons why communities have laws.]
5. What consequences might you need for breaking rules in your community? [Social Studies standard 423.01a: Identify the rules of the classroom and school and the consequences for breaking these rules.]
6. Who might be the leader of your community? [Social Studies standard 423.01b: Identify qualities of a good leader.]
7. What kinds of businesses might there you want or need in your community? [Social Studies standard 424.01b: Explain the concepts of supply and demand and the role of the consumer and producer.]

You may wish to allow a few children to talk about their “ideal” communities.
Present the following vocabulary words and their definitions. Use each in a relevant sentence. Check for students’ understanding.

1. seasons: the four parts of the year—spring, summer, fall, and winter
2. edge: border
3. naturally: in a natural way
4. uncomfortable: not comfortable; troubled
5. remembering: calling back to mind

Using slides taken of the cover, title page, and story of *Roxaboxen*, orally present the entire book to the children. Allow adequate time for all children to hear about and observe all aspects of the community of Roxaboxen.

**Student Product:**

Distribute colored chalk and blue construction paper, direct students to sketch pictures of the communities they had created in their minds earlier. Encourage them, if they wish, to include ideas they learned from *Roxaboxen*. Then, using today’s vocabulary words, write five sentences to describe their communities and attach to the backs of their drawings.

**Optional Additional Activity:**

If time allows, invite children to apply rules they have learned related to the six types of syllables, word origins, and vowel sounds to decode the following *Roxaboxen* words:

<table>
<thead>
<tr>
<th>border</th>
<th>whirling</th>
<th>naturally</th>
<th>remembering</th>
</tr>
</thead>
<tbody>
<tr>
<td>seasons</td>
<td>cemetery</td>
<td>uncomfortable</td>
<td>slope</td>
</tr>
<tr>
<td>edge</td>
<td>decorated</td>
<td>bridle</td>
<td>fort</td>
</tr>
<tr>
<td>trace</td>
<td>blossomed</td>
<td>bandits</td>
<td>gallop</td>
</tr>
</tbody>
</table>

**Arts and Humanities Lesson Extension**

1. **Visualization**

**Imagining a place (7-10 minutes)**
Quiet the room—use only natural light—all computer monitors off—all electrical sounds eliminated.
Ask the children to silent themselves and sit on the floor, legs crossed comfortably and hands laid in their laps.
Play soothing music with no instructions, except to remain calm and quiet.

Now help the children to visualize the following environment by asking the following series of questions:

If you were to imagine a perfect world, what would it be like?
Feel this world—what are the temperature and weather conditions?
Is it hot, cold, breezy—is the sun shining or hidden by clouds? Does it rain often?
You are sitting outside in this world—what natural objects (trees, flowers, bushes, mountains, brush, rocks) do you see?
Describe to yourself the air, the wind—lack of it—and how the air smells.
Who would be with you in this perfect world?
How would people act?
What animals would live in this world?
What would people do for fun?
Describe your favorite place in this world.

Recording of ideas (10 minutes)
Next, provide each student with a sheet of clean art paper and crayons or color pencils. Ask the child to record through visual images (both realistic and abstract) as many details of their world as they can recall from the visualization exercise. Ask the children to record their images quickly, as this is a mental “list” to help them remember what they had imagined. (This quick exercise may actually result in a larger, final art project at the end of the unit).
Humanities Standard One: (868.02. b. 2)
Identify ideas and emotions that are expressed through visual arts and other disciplines.

Humanities Standard Two: (870.02.b.2.)
Discuss how symbols create meaning in art.

Sharing of ideas (6 minutes)
Finally, pair the children and allow one person to talk about his or her ideas for 3 minutes. Then call time and have the second child talk about his or her ideas of 3 additional minutes.

Housekeeping (5 minutes)
Ask the children to sign their pictures, collect the work, and keep it for a later project.

Reading the story (15 minutes)
As the children listen to the story for the first time, ask them the following question.
Can you imagine becoming one of the characters in this story? Which person seems to act most like you do?
2. Characterization: Science

Roxaboxen
Written by Alice McLerran
Illustrated by Barbara Cooney

Grade: Three

Purpose: Broaden student’s understanding of a desert biotic community

Objectives: Students will be able to do the following:
• Identify plant and animal adaptations for desert life
• Compare non-desert plant and animals to desert plant and animals

Idaho Achievement Science Standards (Grade 3):
577.01: Understand the theory of biological evolution.
   Content Knowledge and Skill
   577.01a Investigate diversity of plants and animals and how they adapt in order to survive in their environment.

583.01: Understand that interpersonal relationships are important in scientific endeavors.
   Content Knowledge and Skill
   583.01a Work in teams to solve problems.

Materials/Resources:
Cacti or other desert plants, or pictures of same.
Sample mammals (a gerbil or kangaroo rat would be very appropriate) and reptiles (lizards would be particularly good.) suitable for display in a classroom for student observations or equivalent photos.

Intro to the Desert Environment

Teacher Background information:
Life is both aggressive and tenacious. Virtually any environment on the planet is colonized over time. Life forms with characteristics that confer a survival advantage in a particular environment, over time, adapt and fill a niche within the biotic community. Deserts are a particularly good example to demonstrate the adaptability of life in a challenging environment.

One of the key characteristics of a desert is the scarcity of water. Any organism that survives in a desert environment must have a series of strategies to limit water loss and acquire the water they need to survive. There are a rich variety of strategies in use by desert organisms.

Animal adaptations:

Reptiles: principally lizards, snakes, and tortoises, all have a waterproof, leathery skin which limits water loss. Many of these animals make use of burrows during the heat of the day, the moisture trapped in
subsurface soil creates a humid environment that helps limit water loss and the burrow itself acts like a small cave, moderating the air temperature, making it possible for reptiles to maintain a more moderate body temperature. This is especially important since the metabolism of reptiles is not suitable to maintain a constant body temperature.

**Mammals:** such as kangaroo rats and gerbils also make use of burrows to limit water loss, and avoid extremes of temperature. Additionally, they adopt a nocturnal life style which has them foraging for food during the cool of night. The large intestines (colon) and kidneys of desert animals is often more efficient than their relatives in temperate climates. This results in fecal pellets that have a very low water content, and concentrated urine. Less water is lost during waste excretion. The digestive system of some desert mammals is efficient enough to extract needed water from the seeds used as a food source. In some cases, additional water is obtained by licking early morning dew from vegetation.

**Plant adaptations:** Plants do not have the mobility that animals use to moderate the environmental stresses inherent in desert life. In essence plants have to “stand there and take it”. The adaptations plants use to help increase the chances of survival are numerous and varied. The most obvious adaptation is a decrease in leaf size. The most extreme example of this is the spines found on cacti, which are really highly modified and reduced leaves. The outer covering of desert plants is much thicker than found in non-desert plants and acts as a water barrier to trap water in the plant. Tissues within the plants are adapted to store water during the rare times of rain, and slowly release it to the plant tissues during drier seasons. Even a plant’s reproductive cycle is tied to the brief wet season found in a desert environment where the seasonal rains will trigger a rush of flowering. The seeds produced in this burst of reproductive activity may be coated with a chemical to suppress germination until enough water is present in the soil to allow the young plant access to enough moisture to complete its life cycle.

**Activities:**

**Plants:** Obtain either cactus plants or pictures of cacti, and plants more commonly found as house plants such as zebrina, ivy, coleus, or begonias or pictures of house plants. Show the pictures or plants to the class and ask students where they think each of the plants would be found. Then put the students in small groups (3-4), give each group two examples of desert plants and two of house or garden (non-desert) plants, and have each group list two similarities and two differences between the types of plants, (set a time limit). These ideas should be written on large strips of paper that can then be attached to a sheet of chart paper posted in place visible to the class (stress importance of handwriting and spelling). Then as a class have each group share one idea (attach it to the chart under the correct category) until all different ideas have been posted on chart. The teacher can encourage discussion regarding the differences and similarities and the reasons for each.
Animals: Obtain pictures of mammals and reptiles. Show the pictures to the class and ask students where they think each of the animals would be found. Then put the students in small groups (3-4), give each group two examples of mammals and two of reptiles, and have each group list two similarities and two differences between the types of animals. (Set a time limit.) These ideas should be written on large strips of paper that can then be attached to a sheet of chart paper posted in place visible to the class (stress importance of handwriting and spelling). Then as a class have each group share one idea (attach it to the chart under the correct category) until all different ideas have been posted on chart. The teacher can encourage discussion regarding the differences and similarities and the reasons for each.

**Arts and Humanities Lesson Extension**

2. Characterization and Setting

**Picturing the cultural Climate: (10-20 minutes)**

**Procedure for Teaching**

Take the children on a “Virtual Hike” through the Yuma, Arizona landscape through the panoramic shot of the Mittry Lake area (taken in 2001). Explain that this view is how the landscape looks today. [Website: http://doyuma.com/Demo/Pano/Test2.htm](http://doyuma.com/Demo/Pano/Test2.htm)

Next show the children pictures of Main Street Yuma, Arizona, from the early 1900’s through the 20th century. [Website: http://www.yumamainstreet.com/history.htm](http://www.yumamainstreet.com/history.htm)

What changes in the city do you see? What picture of the town do you think children would most enjoy? Which photo makes you feel most happy? Why?

Finally, help the children imagine ancestors from prehistoric times by visiting a website or looking at pictures from the Yuma Field Office of Archaeological Resources: [Website: http://azwww.az.blm.gov/yfo/archeol.htm](http://azwww.az.blm.gov/yfo/archeol.htm).

**Answering questions about Yuma’s ancestors: (10 minutes)**

Invite the children to write a group three-sentence response to the following questions, placing them in committees of 3-5 “archeological teams.” Ask each student to share one “discovery” that is written on a 3/5 card provided by the teacher.

**Humanities Standard Two: (870.01)**

*Conduct analyses in the arts and humanities disciplines.*

**Humanities Standard Two: (870.02)**

*Engage in reasoned dialogue about arts and humanities issues.*
3. Organization: Social Studies

Roxaboxen
Written by Alice McLerran
Illustrated by Barbara Cooney

“A town of Roxaboxen began to grow, traced in lines of stone:
Main Street first, edged with the whitest ones,
And then the houses.”

Grade: Three

Purpose: Broaden students’ understanding of community

Objectives: Students will be able to do the following:
• Translate reading material into a visual image
• Design a map using symbols and grid

Idaho Achievement Social Studies Standards (Grade 3):
426.01 Understand the spatial organizations of people, places, and environment on the earth’s surface.

  Content Knowledge and Skills
  426.01a: Describe the concepts of globe, continent, country, state, county, city/town, and neighborhood.
  426.01c: Locate on a map waterways, landforms, cities, states, and national boundaries using standard map symbols.
  426.01d: Use a map title, map key, scale, cardinal directions, and symbols to interpret a map.
  426.01e: Use a number/letter grid to find specific locations on a map.

Procedure for Teaching:

Mapping Roxaboxen

Materials:

(2) handouts
Ruler
Colored pencils
Pencil/pen

Distribute a copy of the “Mapping Roxaboxen” and the “Mapping Roxaboxen Question Sheet” handouts to each student. Read the identified lines from the story then orally instruct each student to create his/her map of Roxaboxen.
“The street between Roxaboxen and the houses curved like a river,
so Marian named it the River Rhode.
After that you had to ford a river to reach Roxaboxen.”

1. Label the River Rhode.

“A town of Roxaboxen began to grow, traced in lines of stone:
Main Street first, edged with the whitest ones,”

2. On the east side of River Rhode, draw a line that connects (A) to (B) and label the line Main Street.

   “and then the houses.
   Charles made his of the biggest stones.
   After all, he was the oldest.”

3. Using the symbols on the Question Sheet, draw Charles’ house on the west side of Main Street – next to the letter (B). Then add houses for Anna May above (G), Frances underneath (H), little Jean underneath (E), Eleanor underneath (F), Jamie underneath (C), and Paul underneath (D).

   “Later on there was a town hall.
   Marian was mayor, of course;
   That was just the way she was.
   Nobody minded.”

4. At the center of Main Street, on the west side, draw the town hall.

   “After a while they added other streets.
   Frances moved to one of them and built herself a new house outlined
   in desert glass,
   bits of amber, amethyst, and sea-green:
   a house of jewels.”

5. Draw three new streets that cross Main Street by connecting (C) to (D); (E) to (F); and (G) to (H).

6. On the east side of Main Street, draw Frances’ new house on the (E) to (F) street.

   “And because everybody had plenty of money,
   There were plenty of shops.
   Jean helped Anna May in the bakery –
   Pies and cakes and bread baked warm in the sun.
   There were two ice cream parlors.
   Was Paul’s ice cream the best, or Eleanor’s?”
7. At the northwest corner of Main Street and (C)-(D) street, draw Anna May’s bakery. Draw Paul’s ice cream parlor between Main Street and (H) and Eleanor’s ice cream parlor between Main Street and (D).

   “Of course, if you broke the speed limit you had to go to jail.  
   The jail had cactus on the floor to make it uncomfortable, 
   And Jamie was the policeman.”

8. Draw the jail on the north side of the town hall on Main Street.

   “Sometimes there were wars.  
   Once there was a great war, boys against girls.  
   Charles and Marian were the generals.  
   The girls had Fort Irene, and they were all girl scouts.  
   The boys made a fort at the other end of Roxaboxen, and they were all bandits.”

9. At the north end of Main Street, draw and label Fort Irene. At the south end of Main Street, draw and label the boys’ fort.

   “Roxaboxen had a cemetry, in case anyone died,  
   but the only grave in it was a dead lizard.”

10. West of Main Street, on the north side of (E)-(F) street, draw and label the cemetery.

   “That summer there were three new houses on the east slope  
   and two new shops on Main Street.”

11. Draw three houses east of Main Street in the open field between (H) and (F) and the new shops on the east side of Main Street - one between (E)-(F) street and the other between (C)-(D) street.

12. Create a map grid. Use a ruler and a yellow colored pencil to draw straight lines across your Roxaboxen map that connects the dots from the north to the south (vertical) and the dots from the west to the east (horizontal).

13. Label the dots in the north from (A) to (G). Number the dots in the west from (1) to (8).

14. Use your Roxaboxen map to complete the question sheet.
Homework Activity
Home-to-School Map

Materials:
Unlined paper
Ruler
Colored pencils
Pencil/pen

Distribute the Home-to-School assignment sheet.

Suggested Assessment Exercise:

As an end of the school year activity, tell the class that you will be grading the accuracy of their maps by visiting each of their houses to leave a “treat” at the door.
1. Anna May has to go to jail for speeding. Identify the grid coordinates for the jail. (D4)

2. Paul’s house is located at the east end of (C)-(D) street. Identify the grid coordinates for Paul’s house. (F3)

3. Fort Irene is located at the north end of Main Street. Identify the grid coordinates for Fort Irene. (D3)

4. Jamie’s house is located at the west end of (C)-(D) street. Identify the grid coordinates for Jamie’s house. (A5)

5. Eleanor’s house is located at the east end of (E)-(F) street. Identify the grid coordinates for Eleanor’s house. (G5)

6. When Eleanor walks from her house to the Town Hall to visit Marian, what direction is she walking? (west)

7. As mayor, when Marian needs to run to Fort Irene from the Town Hall, what direction is she running? (north)

8. When the “bandits” were at war with the “scouts”, after attacking Fort Irene, the bandits had to run in which direction to be safe? (south) Identify the grid coordinates for the bandits fort. (D8)

9. If each grid line represents twenty (20) feet, what is the distance between Fort Irene and the bandit’s fort? (Approximately 120 feet)

10. If each grid line represents twenty (20) feet, what is the distance when Paul walks from his house to Main Street, south on Main Street, and east on (G)-(H) street to his ice cream parlor? (Approximately 110 feet)
Home-to-School Map
Assignment Sheet

Date Due: _______________________

Materials:
unlined paper
ruler
colored pencils
pencil/pen

General Instructions:
Use at least six (6) symbols.
Label at least five (5) main streets plus your neighborhood.
Draw your route from home to school in red.
Use yellow grid lines:
horizontal – letters
vertical – numbers
Give the grid coordinates for:
your house
the school

one-half inch margins on all sides of the map
two inch by three inch title block for legend
include:
title of map
symbols
compass rose

“The years went by, and the seasons changed, until at least the friends had all grown tall, and one by one, they moved away to other houses, to other towns.”
4. Investigation: Mathematics

*Roxaboxen*
Written by Alice McLerran and
Illustrated by Barbara Cooney

Grade: Three

Purpose: Broaden students’ understanding of geometric shapes and measurement

Objectives: Students will be able to do the following:
- Demonstrate understanding of newly-introduced vocabulary words
- Demonstrate understanding of measurement as it relates to perimeter

Idaho Achievement Mathematics Standards (Grade 3):
288.02 Use reasoning skills to recognize problems and express them mathematically.
  **Content Knowledge and Skills**
  288.02a: Use a variety of methods, such as words, numbers, symbols, charts, graphs, tables diagrams, and models, to explain mathematical reasoning and concepts.
289.01 Understand and use U.S. customary and metric measurements.
  **Content Knowledge and Skills**
  289.01a: Select and use appropriate units and tools to make formal measurements in both systems (time, length, temperature, perimeter).
  289.01g: Use appropriate vocabulary.
291.01 Apply concepts of size, shape, and spatial relationships.
  **Content Knowledge and Skills**
  291.01a: Identify, compare, and analyze attributes of two-and three-dimensional shapes and develop vocabulary to describe the attributes.
  291.01c: Investigate perimeters in real-world situations.
  291.01e: Use appropriate vocabulary.
291.02 Apply graphing in two dimensions.
  **Content Knowledge and Skills**
  291.02a: Apply ideas about direction and distance.
292.02 Collect, organize, and display data.
  **Content Knowledge and Skills**
  292.02a: Collect, organize, and display data in tables, charts, or graphs in order to answer a question and/or test a hypothesis.

Materials/Resources:

Book: *Roxaboxen*
Vocabulary list of words and definitions
Measuring tools (rulers, tape measures, “straw” string, etc.)
Individual measurement recording sheets
Books, desks, and other polygonal objects (although for 3-dimensional objects, we will only be investigating perimeters of their “surfaces”)
White scrap paper for crumpling (to line “streets” of classroom Roxaboxen)
Chart paper for recording measurements and perimeters
Various colored markers for chart paper

**Whole class instruction:**

Read and show accompanying illustration for *Roxaboxen* pages 7-8:

“A town of Roxaboxen began to grow, traced in lines of stone:
Main Street first, edged with the whitest ones,
and then the houses.
Charles made his of the biggest stones.
After all, he was the oldest.
At first the houses were very plain, but soon they all began to
add more rooms.
The old wooden boxes could be shelves or tables or anything you wanted.
You could find pieces of pottery for dishes.
Round pieces were best.”

Ask the children to close their eyes and imagine what they would envision as a Roxaboxen community within their classrooms. Ask the following:
1. How many streets?
2. How many houses?
3. How many rooms?
4. What material could be used to make the houses?
5. What would be useful to measure the outside edges of the houses?
6. What would be useful to measure the “streets” lined with white “stones?”

Ask the children to identify what shapes they see inside their own classroom. Record their responses on the overhead or chart paper. Present the following vocabulary words and their definitions. Use each in a relevant sentence. Check for students’ understanding.

**Mathematics Vocabulary:**

*In story:*
Traced
Lines
Edged
Biggest
Round

*Additional:*
Square
Rectangle
Triangle
Circle
Sphere

Rectangular prism
Length
Perimeter
Side
Edge
Face
Units
Tool
Focus on the definition of perimeter as the distance around an object. Use correct vocabulary to explain how to measure the length of the sides of a 2-dimensional object (or the edges of a face of a 3-dimensional object) in order to find the perimeter. Prepare children to observe, participate in, and record making multiple US customary and metric measurements by handing out measuring tools and individual recording sheets.

- If using rulers or tape measures, a challenge in this lesson may be in getting the children to understand the need to start at “0” and not “1” in order to correctly measure a length. Show children how to put rulers end-to-end very carefully.
- If desired, create a measuring device with straws. Cut straws in 10 cm/1 dm sections and then put multiple straw sections on longer lengths of string.

Suggested sequence:

1. Model measurement problems on overhead projector for entire class.
2. As a class, have students measure and record the lengths of the sides of their math books. Together, add the lengths and discuss the different ways to calculate the same perimeter.
3. Have some students come to front of class to model the measurement process of various different shapes on overhead projector.
4. Students continue to measure the attributes of their books, surfaces of their desks, and other objects in their classroom. Record their measurements on their recording sheets.
5. Students determine and record the respective perimeters. Check for student understanding.

Small group and/or individual student activity and product:

Children create a *Roxaboxen* community inside their classroom. Use desks, boxes, etc. as well as crumpled sheets of white paper (to represent the stones used to outline the *Roxaboxen* streets). Take pictures of this classroom *Roxaboxen* community!

Post a large chart paper on the wall displaying columns with 3-5 category headings for recording lengths of geometric object attributes. These could include sides of rectangles, squares, triangles, etc. and edges of surfaces of books, desks, boxes, etc. Some columns could be used for picture, drawing, or label representations of various geometric objects. Students collect and record measurement data in cm and/or inches of the geometric attributes of their Roxaboxen “houses.” Perimeter calculations can be made where appropriate and recorded in the last column on the chart paper. Discuss any emerging data patterns, alternative measurement strategies, and student conclusions.

Optional Activity:

If time and opportunity allows, invite children to create a *Roxaboxen* community outside on the playground. Make and record measurements of the objects used and determine respective perimeters.
Arts and Humanities Extension Lesson

4. Investigation

Art perspective:
Ask the students to bring household “trash” or recycling bin materials to class for a project. (i.e. empty cereal boxes, egg/milk cartons, etc.). These materials will form the basis for the culminating art project on day five.
5. Creation: Humanities

**Roxaboxen**
Written by Alice McLerran and
Illustrated by Barbara Cooney

Grade: Three

Purpose: Expand students’ understanding of the connections between art, literature, geography, and history—between abstract and concrete settings.

Objectives: Students will be able to do the following:
- Demonstrate a visualization of an abstract world
- Compare an imaged world to a specific geographic and historic setting
- Create an artistic representation that imitates Louise Nevelson’s style of “recycled” art

**Idaho Achievement Humanities Standards (Grade 3):**

868 Standard One: Demonstrate an understanding of the cultural and historical contexts and interrelationships of the arts and humanities disciplines among various cultures.

870 Standard Two: Conduct analysis, engage in reasoned dialogue, and demonstrate informed judgment about philosophical, aesthetic, or ethical arts issues.

872 Standard Three: Communicate in the humanities disciplines through application and creative expression.

Materials/Resources:

- Book: *Roxaboxen*
- Musical recordings: selected by instructor
- Internet resources: sites included below
- Recycled materials: objects brought from home
- Art examples: images of Louise Nevelson’s art, enclosed
- Art supplies: crayons, paint, glue, as needed
- 3 x 5 cards

*Individual lesson ideas have been identified as extensions to the daily plans for Days #1, #2, and #4.*

Summative Activity:

Recalling the importance of recycling: (5-7 minutes)
Place on each student’s desk an object that was examined yesterday—the item need not be one that the student has brought. It may be better if the student has not previously held the object.

On a 3x5 card, ask the student to list:
   a. How the object was originally used or consumed.
   b. How a person 300 years from now might view the purpose of the object
   c. How a creative person today might reuse the object.

Then allow the student to add 3-5 additional objects (or more if time allows) to their original recycled object.

**Learning about a famous “artist of recycling:” Louise Nevelson  (10 minutes)**
Share with the students several pictures of Louise Nevelson’s art. You may visit a good website that includes pictures of her art at:
http://www.artcyclopedia.com/artists/nevelson_louise.html

For this lesson the two enclosed images of Nevelson’s art are included:

**Procedure for Teaching:**
Give each student one or two pictures of Nevelson’s art and ask the following questions:
How well does the title of this object fit it?
How does Nevelson use old objects in new ways?
Do you like her approach to making new things out of old things?
*Humanities Standard Two: (870.03.b.3.)*
(3) Show how expression in art causes different responses from viewers.

**Trying out Nevelson’s Technique: (20 minutes minimum)**
Ask each student to create his or her own three-dimensional piece of art, using two or more of the objects they have been given. Students may add color, texture, and design to the original recycled objects, but they must incorporate the objects in the design and give the final product a title that fits the project.
*Humanities Standard Three: (872.02.b.1, 2, 3)*
(1) Name and use different art materials.
(3) Reproduce an existing work respecting the intent of its original creator.
(5) Express personal preferences for specific works and styles.

Ask the students to display their final products. Each student should select his/her two favorite art pieces and explain why they like these specific works on a 3x5 card.
*Humanities Standard Three: (872.02.b.1, 3, 5)*
(1) Name and use different art materials.
(3) Reproduce an existing work, respecting the intent of its original creator.
(5) Express personal preferences for specific works and styles.
Humanities Standards Three: (872.03.b. 1, 3)
(1) Show respect for personal work and works of others.
(3) Experiment with different materials, techniques, and processes in the visual arts.

Extra Activities:
Two ideas for hands-on and discussion activities are enclosed in the page taken from the Nevelson website.