

## Spring 2004 PreK-12 Newsletter



### Celebrations

**April 1 April Fools Day**

**April 4 Palm Sunday**

**April 6 Passover**

**April 9 Good Friday**

**April 11 Easter**

**April 21 Adm Professionals Day**

**April 22 Earth Day**

**April 30 Arbor Day**

**May 1 May Day/Join Hands Day**

**May 4 National Teachers Day**

**May 5 Cinco de Mayo**

**May 6 Nurses Day**

**May 9 Mothers Day**

**May 15 Armed Forces Day**

**May 22 Maritime Day**

**May 31 Memorial Day**

**June 14 Flag Day**

**June 20 Fathers Day**

**June 20 Emancipation Day**

**June 21 First Day of Summer**

### PreK-12 Springtime Activities and Lesson Plans

From PBS TeacherSource <http://www.unctv.org/education/tvforteachers/index.html>

#### READ—VIEW—DO (RVD)

**RVD#1. Clifford - No Small Parts, Only Small Puppies**

Discover the wonders of spring through a discussion with guided questions. Read a book about spring and create your own season's books.

**Subject:** Arts & Literature, Science & Technology

**Grade Level:** K-2, PreK

**Topic:** Earth & Space Science, Books & Stories, Listening & Speaking

**Resource Type:** Lesson Plan

 Standards Match

## NO SMALL PARTS, ONLY SMALL PUPPIES

### (Episode P113a)

Nina has made her friends the stars in her new play about springtime, but she insists that everything be done her way. When her cast and crew quits she is finally able to do everything herself. Will her one-person production be a success?



### Clifford's Idea to Grow On: Play Fair

#### Objective:

It's so important for children to realize that treating others with fairness is rewarding for everyone involved...especially during playtime! When friends work together, everyone benefits in the end.

The following activities nurture:

- Social and emotional skills
- Science and discovery skills
- Language and literacy skills



### It's a Spring Thing!

Help your child explore the changes and growth that take place in spring. Discover what your child knows about spring by first discussing these questions:

- What season comes before and after spring?
- What things outside make up "nature?"
- What signs does nature give that spring has arrived?
- How is the weather different?
- Does spring bring changes in how people dress and play?
- How do plants and animals change?

Make an episode connection by talking about how friends can enjoy one another during spring. Discuss how playing fair and treating others with kindness helps friends have more fun when they play.



### Read and Record Spring!

Read **It's Spring!** By Samantha Berger and Pamela Chanko (Scholastic Hello Reader, 2000) Take a nature walk together, taking notice of spring colors, sounds, budding plants and trees.

Create a "Seasons" book by taking pictures of your child playing and exploring nature each season. This yearlong project will give your child a unique visual record of the seasons and his/her own personal growth.

## RVD #2. Clifford - Shun in the Game

Read a collection of books related to the four seasons and brainstorm ways that you can help with a spring-clean up in your neighborhood.

**Subject:** Arts & Literature, Science & Technology, Social Studies

**Grade Level:** K-2, PreK

**Topic:** Earth & Space Science, Books & Stories, Community & Citizenship

**Resource Type:** Lesson Plan



### SHUN IN THE GAME (Episode P109b)

It's the first beautiful day of spring AND the official opening day of the Courtyard Volleyball season, so why does Shun keep making up excuses for why he can't play?



**Clifford's Idea to Grow On:** Believe in Yourself

#### Objective:

The more children believe in themselves, the more they will free themselves to explore and learn about their world. By giving children opportunities to discover and experience new things, confidence and self-esteem can grow, and grow, and grow! The following activities nurture:

- Language and literacy skills
- Critical thinking and problem solving skills
- Science and discovery skills



#### It's a Spring Thing!

Questions about spring and the four seasons can be answered by reading these fun books:  
Norman Bridwell's *Clifford the Big Red Dog: The Spring Carnival* by Wendy Cheyette Lewison (Scholastic)

- *When Spring Comes* by David Maass (Henry Holt & Company)
- Maurice Sendak's *The Little Bear: The Search for Spring* by Elise Holmelund
- *Minarik* (Harper Festival)
- *It's Spring* by Samantha Berger (Cartwheel Books)
- *Spring Has Sprung* (Spyglass Books) by Jennifer Waters (Compass Point Books)



#### Spring Fling Clean-Up!

##### With a Group:

Have a group reading of *Clifford's Spring Clean-Up* by Norman Bridwell (Scholastic). Discuss story, then brainstorm how everyone could "spring clean" around their own home. Identify areas around the neighborhood or community that could benefit from a "Spring Fling Clean-Up." Seek opportunities for group to participate with organizations that include children in community service projects. Participation is key for children to experience how important they are to they own community!

#### RVD#3. Life 360 - Tens: Connotation Creations

This study uses ten as a springboard for understanding connotations in writing activities. Have fun and be creative with these "TEN" writing projects.



**Subject:** Arts & Literature

**Grade Level:** High, Middle **Topic:** Writing Skills

**Resource Type:** Lesson Plan

**Grades:** 5-8

**Subjects:** Language Arts

**Estimated Time of Completion:** 2 to 4 fifty-minute periods

#### I. Summary

- Ten is a common number. We use a base ten math. We need our ten toes and ten fingers. Many obey the Ten Commandments. There are ten bowling pins. There are commonly used phrases: a perfect ten, hang ten, 10-4, and the top ten. An "X" is a Roman numeral "ten." Ten is relative.

Would you like ten cents or ten dollars? Ten years old might be considered a good age to be. The tenth grade might be the best or worst grade to attend. "Ten" has different connotations. Connotations are perceptions. How we perceive things and how we relay that perception when we write is an important skill. Description with just the right word delivers the correct meaning to the reader.

- This study uses ten as a springboard for understanding connotations in writing activities. Have fun and be creative with these "TEN" writing projects.

## II. Objectives

- Students will understand the importance of descriptive language and value perceptions based on choosing the correct word.
- Students will understand how connotations are a part of their perceptions of words.
- Students will use and identify synonyms in their language.
- The student will interpret text and make judgments by using prior knowledge and experience.
- The students will engage in a process of generating ideas, drafting, revising, editing and publishing or presenting.

## III. Materials Needed

- Pencil and paper
- The board and chalk, an overhead and transparency, or another presentation device
- A tape of this episode of Life 360 or access to the web site [www.pbs.org/life360](http://www.pbs.org/life360)
- TV and VCR
- Computer with Internet access
- LCD projector, or another type of computer projection device

## IV. Procedure

1. The teacher should explain that good word choice when writing or speaking depends on having an extensive vocabulary. Many words have synonyms thus providing an opportunity to choose just the right word to express your intended meaning. Students sometimes choose words based on connotations. These words carry their own feelings or shades of meaning.
2. Ask the students to write a sentence using the word "ten." Have students read their sentences and see if there are variations of meaning in their sentences. Provide the students some references to "ten" in many situations. Math is based on a base ten. Lots of people obey the Ten Commandments. There are commonly used phrases: a perfect ten, hang ten, 10-4, and the top ten. Urge students to think of other ways that ten is used.
3. Everyone in the room takes out a sheet of paper and his/her art supplies. Tell the students that discussion is not allowed. They will be illustrating connotations by drawing a personal picture. Explain that when the teacher provides the prompt that they will get a "mind" picture of the word. They are to draw what they see would be an illustration for the word.
4. The teacher should provide the prompt, "boat." Everyone's picture will look different. The teacher explains that no one can ask a question or say anything. Just draw their picture of a boat.
5. Students will draw their idea of a boat and be sure and color it. (Some will draw sailboats, rowboats, motorboats, canoes, and yachts. Some students will have large boats and some will have small ones. Students' boats will vary in color.)

6. The teacher will urge students to share the boat that they have drawn. Discussion will follow of the different ideas of boats in the classroom. Students should draw a conclusion that boat is a term where many people have their own connotation based on their prior knowledge and experience. It is the writer's responsibility to create the correct visual picture of the boat if in the writing that is important. Therefore now students should describe their boat using the correct adjectives such as color and size words.
7. Have the students write a descriptive paragraph to go with their boat.
8. Discuss with students words that have different connotations to us and why. Words like "fragrant" express an opinion that it smells great, but a synonym like "odor" carries the connotation of a bad smell. Students should understand that when writing, choosing the right word is of great importance.
9. Have students pretend to be the teacher. Their task is to write a letter home to the parent expressing how the student is doing in class. Have students choose adjectives from the list of synonyms below that they want to be in the letter home to the parent:  
amusing.....silly  
show off.....perform  
rowdy.....lively  
curious.....nosy  
loaf.....relax  
manipulative.....clever  
careful.....timid  
talk.....chatter
10. Discuss the words with the students. How would their parents react to a note that said that they chattered constantly or talked to respond appropriately? How would parents react differently to he/she "shows off" or he/she performs well in class? Students should begin to see the value of choosing a synonym well.
11. Have students respond with a personal opinion paragraph describing how connotations might affect bias or prejudice. How do connotations, which are built on prior experience, affect our opinions of others? Do we judge others based on our connotations of people of color, religion, or physical features? Where do these connotations originate?
12. Ask students to raise hands in response to the following questions: How many students feel that ten is a lot? How many students feel that ten is only a few? Now have students explain their views in a paragraph on how this question is relative to what one is discussing.
13. The teacher will show small clips from this eleventh episode of Life 360, or multimedia components from the web site, [www.pbs.org/life360](http://www.pbs.org/life360). Be sure and listen to Michel's comments on the "insights" section of the website. Have students listen for "ten" and its meanings. Have students watch for other words that might have different connotations.
14. Have students write about being ten years old. Choose at least two words from the synonym word list from below to include in your story.

### 15. Word List

thrifty.....stingy

bold.....rash

slender.....bony

antique.....old-fashioned

chat.....gossip

choked.....crowed

cheap.....inexpensive

pushy.....forceful

jewelry.....trinkets

pressured....encouraged

gaudy.....bold

16. Have students think of other synonyms that carry both positive and negative connotations and would, therefore, have to be considered carefully when writing.  
(downpour and shower, flattered and praised, slender and bony, overweight and fat, and polite and submissive)
17. Design a bumper sticker or a t-shirt slogan using the word "ten." Example: "X" Rated.....but a "10" in Ancient Rome.
18. Make "ten" top "ten" lists. Examples: The top ten reasons for an extensive vocabulary. The top ten reasons for listening in class. The top ten reasons for enjoying the age of ten. The top ten reasons for becoming a teacher. The top ten reasons for eating broccoli.
19. As a concluding project and to further vocabulary for writing skills, have students create a list of words with "ten" in them. See who can have the longest list.  
(Tennessee, bitten, tender, tend, attention, listen, content, tendon, etc.) Discuss the words in class and make sure all students know the meanings of the words on their lists.

### V. Classroom Assessment

(Each writing assignment would be worth 10 points making a total of 100.)

Many of the activities of this plan yield observable results that may be assessed as activities are completed. An alternative to this assessment method would be to have students keep a portfolio for this unit. Keeping work in a folder would be a learning and organizational tool for students. It would be easy for a teacher to translate the ten needed items into a number grade should the teacher require a number grade.

Suggestions for things to be included in a student portfolio would include:

- Illustration of a boat
- Descriptive paragraph of the drawing of a boat
- A letter home to the parent expressing how the student is doing in class
- A personal opinion paragraph describing how connotations might affect bias or prejudice
- Students will explain their views in a paragraph on how ten is relative to what one is discussing
- Students write about being ten years old
- A list of synonyms that carry both positive and negative connotations
- Design a bumper sticker
- Make "ten" top "ten" lists.

## VI. Extensions and Adaptations

- Think of a word that has a synonym that could be used with a negative and positive connotation. Write a complete sentence using the word in a positive manner. Exchange papers with another student and using this same word write a complete sentence using the word with a negative connotation.
- Create a list of words and exchange papers for another student to provide a synonym.
- Write a dialogue between two people where choosing the incorrect word results in hurt feelings or in a huge misunderstanding.
- Write a paragraph on why an extensive vocabulary is so important to writing skills.
- Rewrite the Ten Little Indians song with your own version of Ten.....
- Create a mosaic of ten's. Find them in magazines, books, etc. and cut them out and glue them on cardboard to make "ten" art.
- Use the study of "ten" to discuss a play on words or a pun. Describe a tin "ten."
- Have students create or illustrate other puns (climbing the wall, driving me crazy, in the bag, etc.).
- Take another number other than ten and do some of the same activities with it that was done with "ten" in this plan.

### Standards From McREL

<http://www.mcrel.org/standards-benchmarks/docs/contents.html>

### Language Arts

- Demonstrates competence in the general skills and strategies of the writing process
- Demonstrates competence in the general skills and strategies of the reading process
- Uses descriptive language that clarifies and enhances ideas (e.g., establishes tone and mood, uses figurative language, uses sensory images and comparisons, uses a thesaurus to choose effective wording)
- Uses paragraph form in writing (e.g., arranges sentences in sequential order, uses supporting and follow-up sentences, establishes coherence within and among paragraphs)

### RVD#4 NewsHour Extra - Responding to Quotes and Aphorisms

Use famous quotes and aphorisms about fear or anxiety as a springboard for conversation about war and terrorism. Students will then create their own quote/aphorism and compare interpretations with other classmates.

**Subject:** Arts & Literature, Social Studies

**Grade Level:** High, Middle

**Topic:** World Literature, American Literature, United States History: 1963 - present, **Civics:** Government, Writing Skills

**Resource Type:** Lesson Plan

### RESPONDING TO QUOTES AND APHORISMS



Critical Analysis and Writing

*By Raven Tyler, Assistant Editor with Online NewsHour and a former high school English and Journalism teacher*

- **Objective:** The objective of this lesson plan is use famous quotes/aphorisms about fear or anxiety as a springboard for conversation about war and terrorism. Students will then create their own

quote/aphorism and share and compare interpretations with other classmates who have chosen the same topic. The original quotes/aphorisms can be compiled into a classroom "Book of Quotes." This lesson includes warm up, pre-writing and discussion questions, and a writing activity.

- **Grade level:** 9-12
- **Estimated class time:** 1-2 class periods
- **Materials:** A copy of the handout with selected quotes, a copy of Bartlett's Quotations or access to the Internet (Bartleby.com), dictionaries, paper, pen.
- **Handout:** List of anxiety quotes, warm up questions, discussion questions, and pre-writing questions
- **Website resource:** [Bartleby.com](http://Bartleby.com)

### Correlations to National Standards

Introductory and Developmental Activity: Have students answer the warm-questions on the handout, then review as a class.

### Warm-up questions

1. What are quotations? Aphorisms? Explain the differences between the two.
2. Why do you think people use quotations or aphorisms to explain certain situations?
3. Can you think of any of your favorite quotations? Share with the class.

### \*Guided practice activities\*

**Pre-writing activity:** Have students answer the discussion questions individually, then as a class reviews the answers. Introduce the word anxiety and explain to students that it is normal to feel anxiety and that it can increase during times of uncertainty. Students will create their own web cluster defining the word, supplying related words and examples of times students have felt some form of anxiety.

### Discussion Questions:

1. Do you feel any anxiety about the U.S. entering into a war with Iraq? Why? Why Not?
2. What are some ways that your school and/or community are dealing with the war in Iraq? Are there specific plans or precautions being taken?
3. Do you feel a direct impact, indirect impact, or no impact at all?

**Writing activity:** Next, provide students with the handout of selected quotes about anxiety. Have the students select one of the quotes for interpretation. Students will first answer the five-prewriting questions, then write a 200 to 250-word response using the answers to the prewriting questions. Students should use the dictionary to define any words in the quote they don't know.

### Prewriting Questions:

1. Why did you choose this quote/aphorism?
2. What was the author trying to convey with his/her quote/aphorism?
3. People often use quotes/aphorisms to help explain a topic. Do you think it is an effective way to communicate?
4. Do you think this quote/aphorism relates to the US war with Iraq?
5. Compare/contrast anxiety and fear.

### Handout--Anxiety Quotes

1. *"Anxiety is the dizziness of freedom."* Soren Kierkegaard, Danish philosopher
2. *"Anxiety is the beginning of conscience, which is the parent of the soul but is not compatible with innocence."* Angela Carter, British author
3. *"A free spirit must be able to surmount anxiety time after time."* Mason Cooley, U.S. writer
4. *"Anxiety is not fear, being afraid of this or that definite object, but the uncanny feeling of being afraid of nothing at all. It is precisely Nothingness that makes itself present and felt as the object of our dread."* William Barrett, U.S. philosopher, editor

5. *"The natural role of twentieth-century man is anxiety."* Norman Mailer, U.S. author
6. *"Anxiety is interest paid on trouble before it is due."* Dean Inge, U.S. author
7. *"Anxiety weighs down the human heart, but a good word cheers it up."* Bible: Proverbs 12:25

### **\*Independent activities/Assessment\***

**Classroom assignment:** Students will become the authors of their own "famous and witty" quote. As a class, students should create a list of "abstract" terms, (i.e., love, independence) then choose a "top ten" list. After students have completed their interpretation, divide students into groups with other students who chose the same quote to interpret. Have the students then share their different responses with each other and discuss. Compile the responses into a classroom "Book of Quotes."

### **Correlations to National Standards:**

MCREL Thinking and Reasoning Standards:

Standard 1-Understands and applies the basic principles of presenting an argument  
 Standard 2-Understands and applies basic principles of logic and reasoning  
 Standard 4-Understands and applies basic principles of hypothesis testing and scientific inquiry  
 Standard 5-Applies basic trouble-shooting and problem-solving techniques  
 Standard 6-Applies decision-making techniques

MCREL Life Skills, Working with Others Standards:

Standard 1-Contributes to the overall effort of the group  
 Standard 4 -Displays effective interpersonal communication skills  
 Standard 5 - Demonstrates leadership skills

MCREL Language Arts-Reading Standard 6, Level 10 Relates personal response or interpretation of the text with that seemingly intended by the author.

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### **RVD # 5 Scientific American Frontiers - It's a Kid's World: Body Sense**

Study the elasticity of springs and time the improvement of new skills.

**Subject:** Health & Fitness, Science & Technology

**Grade Level:** High, Middle

**Topic:** Gravity & Forces

**Resource Type:** Lesson Plan

 Standards Match

### **It's a Kid's World: Body Sense**

How do babies learn to reach, kick, crawl and walk? In this story, we'll meet a psychologist exploring possible answers to that question by measuring infants who bounce up and down in a baby jumper. Other psychologists have long been fascinated by the same query, and have proposed various theories to explain why humans do what they do. Some rare archival footage from the 1930s looks at a classic study of twins, and a modern-day researcher computes muscle patterns.

### **ACTIVITY 1: GOING UP?**

The recoil of infant bouncing systems depends upon the elasticity of support components. Some bouncing systems use metal coils; others are made of rubber-like materials. When these supports are stretched, the potential energy of the system is increased. When released, the potential energy transforms into the kinetic energy of the spring's contraction. This activity gives you a chance to investigate the elasticity of a metal coil toy, the ever-popular Slinky.

### **MATERIALS**

- Slinky coil toy
- Meter stick
- Tape
- Stack of books
- Thin board
- 50gm brass mass (or use modeling clay)

### **PROCEDURE**

1. Count off about 20 rings from the bottom of the coil. Open the coil at this point and insert a thin board. Be careful not to bend or damage the coil structure.
2. Place the board on the edge of a table, so that the rings of the coil hang freely. Steady the overhang by placing a stack of books on top of the thin board.
3. Secure a mass (approximately 50gm) to the bottom of the coil. The coil should stretch several centimeters.
4. Tape the meter stick alongside the coil. Use tape to mark the bottom of the coil on the meter stick.
5. Pull the coil down 3cm. Release and observe the highest point of its recoil. Record this value in a table that records:  
LENGTH OF STRETCH (from starting position) and LENGTH OF RECOIL (from starting position)
6. Repeat step 5 using these stretch distances: 6cm, 9cm, 12cm, and 15cm.

### **QUESTIONS**

- What happens to the recoil as you increase the length of the coil stretch? (it increases)
- What is the relationship between the stretch and recoil? (the spring recoils about the same distance as the stretch)
- Why did you secure the 50gm mass to the coil? (you needed to stretch the coil to produce a compressible space for the recoil)

## EXTENSIONS

The ratio of a spring's stretch or compression to the amount of applied force is expressed mathematically by Hooke's Law:  $F$  equals  $kx$ .  $F$  equals the applied force;  $x$  is the amount of stretch or compression; and  $k$  equals the spring constant. After completing this activity, review Hooke's Law. Then, solve for the spring constant of the Slinky.

Compute the frequency per minute of your coil toy by counting the number of times it bounces in five seconds, then multiply by 12 (when a weight equal to that of a baby is put in the jumper, its "natural frequency" is calculated at 79 times per minute).

## ACTIVITY 2: LEARNING TO MOVE

A baby doesn't just wake up one day and walk. That baby has spent months experimenting with movements and practicing different ways of moving its muscles. As you see on *Frontiers*, babies need to learn many things before they can walk; they especially need to practice coordinating their muscles. When you learn a new skill, you also need to practice and give yourself time to perfect the muscle patterns. Measure how practice helps you run faster with this activity.

## POWER PRACTICE

### MATERIALS

- Stopwatch
- Measuring stick
- Cloth strip

### CHALLENGE

1. Divide your class into teams of four students each. Designate a timekeeper for each team.
2. Have each team measure and mark off a racecourse 20 meters long.
3. Have each member run the course without any prior practice. Record the runner's time.
4. Allow each team member to practice running for one minute and then run the course a second time. Record the new time.
5. Have each team member repeat the course a third time. Record the time.
6. Select two team members to run the course as a three-legged race. Secure the right leg of one student to the left leg of the other student. Have them run the course without practice and record the time.
7. Have the other two-team members practice running the course as a three-legged runner and then run the course. Record the time.
8. Each of the three-legged groups should practice moving together for one minute, and then race again. Record the new times.
9. All groups should practice moving together again for one minute and then race the course. Record the times.

### QUESTIONS

- How did the one-minute practice affect the running times of individual students?
- How did one-minute practices affect the running times of three-legged teams?
- Explain the role of practice in the two types of races.

- What are some of the discrete skills the three-legged teams must learn?
- What are some different ways a baby practices learning to walk?

### EXTENSIONS

1. Calculate a runner's speed using the formula: speed equals distance/time. Use your team's data to determine each member's speed in meters per second, feet per second, kilometers per hour and miles per hour.  
(Note: your science textbook probably contains conversions between metric and English units. If not, consult another reference source.)
2. Graph the collected data. The x-axis should display the trials. The y-axis should illustrate the speed of individuals and groups in miles per hour.
3. Apply a similar sequence of practice to learning another skill, such as juggling, hopping on one foot, flipping POGs, writing your signature with your non-dominant hand or shooting baskets. What is the role of practice in learning? Can you correlate the amount of practice time with an improvement in the ability to perform the task?
4. Imagine that a baby is a robot. Draw a flow chart that will instruct the baby on how to get from point A in the room to point B, or, from the table to the door. How many muscles will the baby have to coordinate to perform the task? Is it more efficient for the baby robot to crawl, scoot across the floor, walk by holding onto tables and other objects or walk unaided?

### RVD# 6 Scientific American Frontiers

#### Life's Big Questions: Where Did Life Come From?

Students follow biologists Norman Pace and Sue Barns as they search for answers as to the origin of life in the boiling hot springs of Yellowstone.

**Subject:** Science & Technology

**Grade Level:** High, Middle

**Topic:** Genetics & Evolution

**Resource Type:** Lesson Plan

#### Standards Match

Scientists have long questioned where and when life emerged on our planet. Alan Alda joins biologists Norman Pace and Sue Barns as they search for answers in the boiling hot springs of Yellowstone. The discovery that microscopic creatures can survive in these extreme conditions, along with DNA analysis, suggests that these organisms may be similar to the earliest life forms on Earth. (Note: Organisms in the spring are not true bacteria, but a group of living creatures discovered only recently.)

#### ACTIVITY 1: Just How Tough Are Bacteria?

Many scientists believe that the earliest forms of life existed all over primitive Earth in conditions very similar to the ones you saw in the Yellowstone hot springs. If life can exist at high temperatures, then is it possible that simple, modern terrestrial bacteria might have inherited some of the traits associated with the more ancient forms? Let's find out.

#### MATERIALS

- |                             |                   |
|-----------------------------|-------------------|
| • small pot                 | • filter paper    |
| • hot plate                 | • grease pencil   |
| • water                     | • paper towels    |
| • forceps                   | • goggles         |
| • carrot slice              | • apron           |
| • petri dish or sterile jar | • insulated glove |

**NOTE: WEAR YOUR EYE AND CLOTHES PROTECTION. ALWAYS USE A POT HOLDER OR INSULATED GLOVE TO HANDLE HOT EQUIPMENT.**

### **PROCEDURE**

1. Cut a piece of carrot about 5 cm long, 2 cm wide and no more than 5 cm thick. Fill a small pot with enough clean water to boil the carrot.
2. Using a hot plate, boil the carrot in water for 10 minutes.
3. While the carrot boils, sterilize the petri dish, filter paper and forceps in boiling water or a steam bath.
4. Place filter paper on the bottom of the petri dish.
5. Place the boiled carrot flat side down on the filter paper. Cover the dish and label it. Place the dish in a warm place. Let it sit undisturbed 3 to 4 days.
6. Write your observations each day in a journal.
7. After a few days, examine the carrot under a microscope for growth samples. Draw observations in your journal.

**Note:** This experiment can be done in a mason jar, but it's important to prepare a sterile sample, no matter where this experiment is conducted. Not all carrot samples will produce bacterial growth. As in all scientific processes, conclusions are open to discussion.

### **QUESTIONS**

- Define the term endospore.
- Did boiling kill all the bacteria on the carrot?
- If bacteria do appear on carrot samples, where do they come from? (Endospores in carrot.) Could this bacteria have inherited traits found in ancient bacteria? What is the difference between an inherited and an acquired trait?
- Research microscopic life forms that survive in the deep ocean near hydrothermal vents. Are these creatures similar to the descriptions of the earliest life forms?
- Speculate on what might have happened if Earth had never cooled down. Write a description of the types of life forms that may have evolved. Support your claim with explanations consistent with present-day knowledge about evolution.
- Why does the water in the hot springs "boil" at less than 212 degrees F? (Reduced air pressure at this elevation reduces the boiling point of water.)

### **ACTIVITY 2: VOLCANIC CALDERAS**

Much of Yellowstone Park lies inside a caldera, a collapsed volcano that erupted about 800,000 years ago. A caldera forms when the crater of a volcano collapses or explodes. Magma close to the surface exerts upward pressure on a volcano and leaks out in the form of lava. If the leak becomes plugged, water can drain into the pressure-laden magma, causing a buildup of tremendous steam pressure under the volcano. If the pressure becomes too great, the volcano explodes. If the pressure gradually lessens, the top of the volcano subsides and collapses. In either case, a caldera is formed. The "blowout" causes the crater to expand to a diameter as small as a mile or in the case of the larger Yellowstone caldera, 40 miles wide! In this activity, you can demonstrate how a caldera is formed.

## MATERIALS

- Small balloon
- 2 - 3 feet of plastic tubing
- Tubing clamp
- Sand
- Tape
- Large cardboard box
- Protractor
- Newspaper
- Dissecting pin or other long pin
- Goggles
- Mirror

## PROCEDURE

1. Choose a piece of plastic or rubber tubing wide enough that the balloon opening must stretch to cover its end.
2. Fold a sheet of newspaper to conform to the bottom of the cardboard box. Make a hole slightly larger than the plastic tube in the center of the bottom of the box. Thread the tube through the hole, leaving the balloon inside the box. Inflate the balloon by blowing through the tube. Clamp the tube.
3. Slowly pour sand over the balloon until it is completely covered. Fashion a small crater in the top of the sand mound. Measure the angle formed by the slope of your "volcano."
4. Slowly release the air in the balloon while observing the "crater."
5. Remove the sand, inflate the balloon and repeat step 3, but this time insert a long pin carefully through the bottom of the box to pop the balloon.

**CAUTION: DO NOT TRY TO OBSERVE THE REACTION FROM THE TOP OF THE BOX. VIDEOTAPE OR FILM IT AND REPLAY IT IN SLOW MOTION (OR WATCH IT ON A MIRROR).**

## QUESTIONS

- Compare the angle formed by the slope of your volcano to the physical characteristics of the three types of volcanoes. Which type does your model represent?
- Do you observe any difference between the gently subsided caldera and the exploded one?
- What geologic processes do the experiments model?  
(Subsidence, such as sinkhole formation, caldera formation, and to some degree, meteor cratering.)
- What does the balloon represent?  
(Magma chamber.)
- What does the air in the balloon represent?  
(Air represents gas or steam in the magma.)
- What would happen if you wet the sand mountain before collapsing it?

**CONSIDER THIS!** Yellowstone Park rangers tell a story of a man who jumped into a hot spring to rescue his dog. The spring had a pH of 3 and a temperature approximately 190 degrees F. What do you think happened to the man? Why? (The man survived, but his dog did not. The high temperature caused severe third degree burns. The acid pH exacerbated the burns.)

Some of the hot springs in Yellowstone have a strong smell of rotten eggs. Their waters are acidic. What kind of acid would you expect to find in a "smelly" hot spring? What kind of acid, if any, would you expect to find in a "non-smelly" hot spring?

(A combination of hydrogen sulfide and sulfur dioxide causes the rotten egg smell, so the acid must be sulphuric. The non-smelly springs contain dissolved carbon dioxide from the breakdown of limestone, so the acid would be carbonic.)

**CONSIDER THIS!** A mining company has proposed building a mine three miles from the border of Yellowstone National Park -- an area still considered volcanically active. What are the pros and cons of the project? What might be the impact on the park's water and wildlife? What about the rights of the company that owns the land? Find out the status of this project, recently debated by Congress and the Department of the Interior. What do you think?

### **RVD#7. Scientific American Frontiers - Science of Sports: Spring Man**

Investigate the transformation of muscle energy to heat energy with simple activities.

**Subject:** Science & Technology

**Grade Level:** 3-5, High, Middle

**Topic:** Heat, Physical Science, Gravity & Forces

**Resource Type:** Lesson Plan



Hugh Herr's sneakers put springs in a runner's stride. By storing potential energy in springs and making muscle power more effective, his sneakers could revolutionize many sports. Herr, who lost his legs in a mountain-climbing accident, is convinced these sneakers -- and his other ingenious devices -- will help people make the most of their natural abilities. Join Herr in field tests of his spring shoes and other inventions.

### **NOTES & DISCUSSION**

- Energy comes in many forms -- kinetic (motion), heat, light, sound, chemical, electrical and nuclear. When energy is used to make things move, it is transformed from one form into another. All energy transformations can be traced back to the sun -- the original source of energy for life on earth.
- Some energy transformations are as simple as what occurs when sunlight warms a person's face and changes to heat energy. Some energy transformations take place in complex chains. When a battery-operated toy car is put in motion, chemical energy (stored in battery) changes to electrical energy (released from battery), which changes to kinetic energy (wheels turn) and sound energy (noise).
- As you saw on Frontiers, Hugh Herr's inventions attempt to maximize the use of muscle energy. How do his sneakers do this? (They make use of the muscle energy that in conventional sneakers would be transformed into unusable heat energy.)

### **ACTIVITY: ENERGY ON THE MOVE**

Investigate the transformation of muscle energy to heat energy by trying these activities at four workstations. Then record your observations.

### **STATION #1**

#### **MATERIALS**

- Thick rubber bands

#### **PROCEDURE**

1. Hold a rubber band to your upper lip to sense its temperature.
2. Remove the rubber band, stretch it rapidly, and then hold it to your upper lip while it is still stretched.

#### **OBSERVATIONS**

- Describe the feeling on your lip after the rubber band was stretched.
- Identify the energy transformations that occurred.

## STATION #2

### **MATERIALS**

- "Superball" with hole drilled in it
- Thermometer

### **PROCEDURE**

1. Carefully place the bulb end of the thermometer in the ball and record the temperature.
2. Remove the thermometer and bounce the ball for 5 minutes; take turns in your group.
3. After the 5 minutes, insert the thermometer in the ball again and record the temperature.

### **OBSERVATIONS**

- Temperature of the ball before bouncing.
- Temperature of the ball after bouncing.
- Identify the energy transformations that occurred.

## STATION #3

### **MATERIALS**

- Hammer
- Nails
- Blocks of hard wood

### **PROCEDURE**

1. Pound a nail 4 to 5 cm into the wood block.
2. Pull the nail out with the claw of the hammer and touch the nail.

### **OBSERVATIONS**

- Describe the feeling after touching the nail just removed from the block.
- Identify the energy transformations that occurred

## STATION #4

### **MATERIALS**

- Plastic bottle with screw-on top
- Thermometer
- Fine sand

### **PROCEDURE**

1. Fill the plastic bottle half full of sand.
2. Carefully insert the bulb of the thermometer into the sand, wait 2 minutes, then record the temperature.
3. Remove the thermometer, screw on the cap, and vigorously shake the bottle for 5 minutes.
4. Remove the cap from the bottle, carefully insert the thermometer in the sand, and then record the temperature.

### **OBSERVATIONS**

- Initial temperature of the sand.
- Final temperature of the sand.
- Identify the energy transformations that occurred.

### **THINK ABOUT IT**

Although you were able to feel or measure some of the heat energy produced in the exercises above, you could not feel or measure all of it. Think of where the "unfeeling" or "unmeasurable" heat energy could be in each activity. The **law of conservation of energy** tells us that energy cannot be created or

destroyed. It can only be transformed from one form to another. Try to identify all the energy transformations that occur when you operate a hair dryer.

### SOLUTIONS

1. The rubber band feels warm because the molecules slide over each other, creating heat from friction when it is stretched. (fusion in sun) nuclear --> (photosynthesis) light --> chemical --> (digestion) chemical --> (nervous) electrical --> muscle --> kinetic --> (friction) heat. Some of the heat energy from the rubber band will cause the air molecules around it to move faster.
2. Each time the ball strikes the floor, most of the kinetic energy from its fall is used to make the ball almost return to the height from which it was dropped. When the ball strikes the floor, molecules in the super ball collide, and some of their kinetic energy changes to heat energy, raising the temperature of the floor, and to sound energy when it strikes the floor. (starting with muscle) muscle--> (before release) potential--> (after release) kinetic --> (friction/contact with floor) heat/sound.
3. The nail feels warm because some of the energy used to overcome the force of friction between the nail and the wood changed to heat energy. (starting with muscle) muscle--> (hammer) kinetic --> (nail) kinetic --> (friction) heat. Some of the heat energy will increase the temperature of the hammer and the block of wood.
4. The temperature of the sand increases because the particles are rubbing against each other and their kinetic energy is being changed to heat energy because of friction. (starting with muscle) muscle --> heat. The temperature of the plastic bottle also increases.

### Lab Notes

- You can use this activity to show how kinetic energy changes into heat energy and to demonstrate the law of conservation of energy.

Note: you may wish to set up materials at each workstation ahead of time.

**CREDIT:** Tim Yanka, science teacher at Holicong Middle School in Buckingham, PA, contributed this activity.

### RVD#8. The Living Edens - Yellowstone: Let's Go! Virtual Yellowstone Tour

<http://www.pbs.org/edens/yellowstone/teach1.html>

Students use mapping and research skills to create visitor guides to Yellowstone National Park, studying the park's history and learning about the geologic processes behind glaciers, mud pots, and hot springs.

**Subject:** Arts & Literature, Math, Science & Technology, Social Studies

**Grade Level:** 3-5, High, Middle

**Topic:** Measurement, Data Analysis, Writing Skills, Geology, Geography, Writing

**Resource Type:** Lesson Plan

 Standards Match

#### Objectives:

Grade Level: 4-6

#### Background:

Yellowstone National Park, established in 1872, is known for its unique geologic features and stunning wildlife. Geysers, mudpots, hot springs, and waterfalls are just a few of the natural attractions that Yellowstone has to offer.

- **A geyser** is a column of hot water and steam that erupts from the earth's surface. Pools of water deep under the earth's surface are heated to the point of boiling. As the pressure builds from the boiling, the water and steam explode into the air through underground cracks in the earth and burst into the air in the form of a geyser.
- **Hot springs** are pools of hot water that have seeped to the earth's surface to form small ponds. At Yellowstone, algae and bacteria flourish in the hot springs and give the rocks beautiful hues of color. The mineral deposits from the water form terraces and other rock formations.
- Boiling ponds of mud (**mudpots**) are also present and are formed by sulfuric acid in the water. The acid dissolves the rock into tiny pieces of clay and the clay mixes with the hot water to make mud. As the steam rises from the within the earth, the mud bubbles as the steam releases into the air.
- **Yellowstone River** runs right through the park. The river flowed during a time period of massive uplift of the area that was caused by forces deep within the earth. The combination of river erosion and uplift has resulted in spectacular canyons and waterfalls within the park.

#### Students will:

- Research the geologic wonders (geysers, hot springs, mud pots, canyons, and waterfalls) of Yellowstone National Park.
- Locate the main geologic features of Yellowstone on a map of the park.
- Write a description of the geologic features to be included on the map for a self-guided tour for park visitors.
- Define the terms geyser, mud pots, hot springs, erosion, and uplift

#### National Standards:

##### National Science Education Standards

<http://www.nap.edu/readingroom/books/nses/html/overview.html#content>

##### Content Standard D: Understanding the structure of the earth system

- Landforms are the result of a combination of constructive and destructive forces. Constructive forces include crustal deformation, volcanic eruption, and deposition of sediment, while destructive forces include weathering and erosion.
- Water is a solvent. As it passes through the water cycle it dissolves minerals and gases and carries them to the oceans.

##### National Geography Standards

<http://www.ncge.org/publications/tutorial/standards>

- Standard 1: How to use maps and other geographic representations, tools, and technologies to acquire, process, and report information.
- Standard 4: The physical and human characteristics of places.
- Standard 7: The physical processes that shape the patterns of Earth's surface.

#### Materials:

- Markers or colored pencils
- Maps of Yellowstone Park copied onto 11" X 17" copy paper.

#### Preparation:

- Teacher will need to make copies of a map of Yellowstone National Park ahead of time. Print a map from the National Park Service ([www.nps.gov/yell/pphtml/maps.html](http://www.nps.gov/yell/pphtml/maps.html)), and then use correction fluid to delete the towns (students will be locating these towns and placing them on the map later).
- Enlarge the map onto 12 " X 19" copy paper for students (one map per group of four students).

#### Procedure:

- Start a class discussion by using a KWL chart [what students know (K), what students want to learn (W), and what they did learn (L)]. Elicit from the class what they already know about

Yellowstone and write their comments in the K column of the chart. Has anyone been there? Where is it? Why is it a national park? What is there to see and do? What kind of wildlife lives there? Then ask them what they'd like to learn about the geology of the park and write their answers in the W column of the chart.

- Tell them that they are going to become park rangers for this assignment and their first job is to make a map of the park for tourists to use when they come to visit. The map will include a brief physical description of points of interest and an explanation of how they were formed. Some of these natural attractions can be viewed on the Yellowstone video (02:41-03:40), and more information on these sites can be found at the "[Reflections on Yellowstone](#)" and "[A Virtual Tour](#)" pages on this website.
- On the front of the map, students will add each entrance to the park and the following villages: Mammoth, Tower Falls, Canyon, Norris, Madison, Old Faithful, Yellowstone Lake, and Grant Village. On the back of the map, students will write descriptions of the following sites along with how they were formed geologically: Old Faithful area, Norris Geyser Basin, Mammoth Hot Springs, and Grand Canyon of the Yellowstone.
- Divide students into groups of four. Give each group a set of materials and show them the available references. Suggestions for references are listed in the Resource section below. They will work together to locate and place on the map the villages listed above. Then each student will research one of the points of interest and write the description on the map near its location or put it on the backside of the map.
- Review the information that was gathered on the maps. Each group will report on one geologic attraction that they researched. List the facts that they report on the L column of the KWL chart -- pay special attention to the scientific/geologic principles students have researched (erosion, thermodynamics, etc.). List any other facts that another group may have found that weren't mentioned by the reporting group. Let the class vote on which attraction they would most like to see. They could then make bar graphs showing the results of their votes.

#### **Assessment Suggestions:**

- Ability to work cooperatively in a group
- Participation in class discussions
- Completion and accuracy of description of points of interest
- Accuracy of map

#### **Extensions:**

- Have students explore the depths of a hot spring and watch a video clip of Old Faithful erupting at: <http://www.nationalgeographic.com/features/97/yellowstone> A lesson that invites students to build model geysers may be found at [http://www.pbs.org/edens/kamchatka/teacher\\_1.html](http://www.pbs.org/edens/kamchatka/teacher_1.html).
- Research and locate on a map where similar geologic features (geysers, hot springs, mudpots, canyons) are found around the world. What do these areas have in common that could explain where these features are found? Create concept maps that illustrate student findings.
- Expand research to include other natural attractions such as Tower Falls, Canyon, Madison, Yellowstone Lake, and Grant Village.
- Research the history of the park and add it as an introductory paragraph on the back of the map.

#### **Resources**

**Map:** [www.nps.gov/yell/pphtml/maps.html](http://www.nps.gov/yell/pphtml/maps.html) (click on the blue "in depth" link, then click on "Planning a Visit," and then click on "Maps & Orientation.")

#### **Web resources for student research:**

PBS Going Places: Yellowstone

[www.pbs.org/wnet/goingplaces3/yellowstone/highlights.html](http://www.pbs.org/wnet/goingplaces3/yellowstone/highlights.html)

Yellowstone National Park

[www.nps.gov/yell/home.htm](http://www.nps.gov/yell/home.htm)

American Park Network: Yellowstone National Park

[www.americanparknetwork.com/parkinfo/ye](http://www.americanparknetwork.com/parkinfo/ye)

Great Outdoor Recreation Places: Yellowstone national park

[www.gorp.com/gorp/resource/US\\_National\\_Park/wy\\_yello.htm](http://www.gorp.com/gorp/resource/US_National_Park/wy_yello.htm)

National Geographic Fantastic Journeys: Yellowstone

[www.nationalgeographic.com/features/97/yellowstone](http://www.nationalgeographic.com/features/97/yellowstone)

**Books:**

Tawney, R., 1998, **Family Fun in Yellowstone National Park**

Frank, S., and Frank, P., 1999, **The Yellowstone Handbook: An Insider's Guide to the Park**

Egan, L.H., 1998, **Kids Discover: Yellowstone Park**

The Yellowstone Association, 2000, **Yellowstone: The Official Guide to Touring America's First**



**National Park**

Knapp, P., **Getting to Know Yellowstone Park**

### More Sites To See

Memorial Day <http://www.usmemorialday.org/backgrnd.html>

National Arbor Day Foundation <http://www.arborday.org/>

Round the May Pole <http://www.umkc.edu/imc/mayday.htm>

Springtime lesson planning links (books and activities)

[http://www.amonco.org/springtime\\_celebrations.html](http://www.amonco.org/springtime_celebrations.html)

Earth Day <http://www.earthsite.org/>

Armed Forces Day <http://www.defenselink.mil/afd/>

# **Jakers!**™

## **The Adventures of Piggley Winks**

Piggley Winks. Grandpa Piggley Winks, the elder family member in a typical contemporary, chaotic household of American city-dwellers, entertains and educates his grandchildren with tales of his childhood on Raloo Farm in the village of Tara in Ireland. As Grandpa's stories unfold, we travel back in time to the comical adventures of the young Piggley Winks (a mischievous pig) and his best friends, Ferny (a young bull) and Dannan (a girl duck). Piggley and his playmates love to create adventures for themselves in the Irish countryside, all based on their own imaginations.

Each adventure presents a dilemma that young children might face in their daily lives. The characters use their problem-solving skills to figure out what to do. To underscore the values of Piggley Winks, each show features a mini-documentary in which real children tell their own stories and discuss dilemmas they have faced. The series' core audience is 4-7-year olds. Each Jakers! episode presents a typical child's dilemma and models, in a humorous way, how to resolve it through problem solving, ingenuity, and sometimes a little help from friends.

- Jakers! supports curiosity and creative expression.
- Jakers! encourages reflection about others, leading to appreciation for the similarities among and celebration of the differences between us and ourselves.
- Jakers! helps children consider creative and imaginative solutions to everyday situations.
- Jakers! helps children appreciate the art of storytelling.
- Jakers encourages interaction between generations.

Workshops for parents, childcare providers, and teachers include the use of program segment, teacher guides or parent tips, hands- on activities, series activity handouts, and related program website

### **Check Out JAKERS! Reading List**

#### **Imagination And Creativity**

***“Harold and the Purple Crayon”*** by  
Crockett Johnson.

***“Where the Wild Things Are”*** by Maurice  
Sendak.

***“Cloudy with a Chance of Meatballs”*** by  
Judi Barrett.

***“Three by the Sea”*** by Edward Marshall.

***“Barn Dance!”*** by Bill Martin, Jr.

***“Ben’s Trumpet”*** by Rachel Isadora.

***“Max Found Two Sticks”*** by Brian  
Pinkney.

***“The Squiggle”*** by Carole Lexa Schaefer.

### **Interaction Between Generations**

***“Grandmas at Bat”*** by Emily Arnold McCully.

***“Song and Dance Man”*** by Karen Ackerman.

***“When I Am Old with You”*** by Angela Johnson.

***“The Gardener”*** by Sarah Stewart.

***“Papa Lucky’s Shadow”*** by Niki Daly.

***“My Mama Had a Dancing Heart”*** by Libba Moore.

### **Friendship**

***“Dreams”*** by Ezra Jack Keats.

***“Poppleton”*** by Cynthia Rylant.

***“Mine’s the Best”*** by Crosby Bonsall.

***“Friends”*** by Kim Lewis.

***“Days with Frog and Toad”*** by Arnold Lobel.

***“Bird Boy”*** by Elizabeth Starr Hill.

***“The Friendship of Milly and Tug”*** by Dian Curtis Regan.

### **Multi-Cultural**

***“The Fool of the World and the Flying Ship”*** by Arthur Ransome.

***“The Long Way to a New Land”*** by Joan Sandin.

***“The Magic of Spider Woman”*** by Lois Duncan.

***“Anansi Does the Impossible”*** by Verna Aardema.

***“A World of Children’s Stories”*** edited by Anne Pellowski.

***“How to Make an Apple Pie and See the World”*** by Marjorie Priceman.

### **Honesty**

***“I’ll Tell On You”*** by Joan M. Lexau.

***“I Did It, I’m Sorry”*** by Caralyn Buehner.

***“That’s Mine, Horace”*** by Holly Keller.

***“Nina, Nina, Star Ballerina”*** by Jane O’Connor.

***“The Peddler’s Gift”*** by Maxine Rose Schur.

### **Courage And Individuality**

***“Sheila Rae, the Brave”*** by Kevin Henkes.

***“Pip’s Magic”*** by Ellen Stoll Walsh.

***“The Art Lesson”*** by Tomie de Palo

***“A Color of His Own”*** by Leo Lionni

***“The Bat Boy and His Violin”*** by Gavin Curtis.

## IN THE NEWS



### **Early Research Shows Positive Impact of Ready To Learn Efforts on Parents & Early Childhood Educators**

Beginning in fall 2003, Mathematica Policy Research, Inc., under contract with PBS, conducted an impact study to measure the effects of *Ready To Learn* workshops on more than 1,000 parents and early childhood educators and the children in their care.

By way of background, a *Ready To Learn* workshop consists of training intended to help adults extend the educational value of PBS children's programming using the *Ready To Learn* Learning Triangle (View, Do, and Read) to provide children the opportunity to practice and repeat important concepts.

Preliminary findings from the impact study conducted at 20 *Ready To Learn* stations indicate that *Ready To Learn* workshops are having a positive impact on the short-term behavior of parents and early childhood educators.

According to the early findings, three months after attending a *Ready To Learn* workshop, parents and early childhood educators were significantly more likely than the control group to discuss a program with the children in their care while watching. Parents who attended a *Ready To Learn* workshop were also significantly more likely than a control group of parents to discuss characters from a program with their children and to view children's television programs along with their children. Early childhood educators who attended a *Ready To Learn* workshop were also significantly more likely than a control group of educators to do activities with the children in their care related to a program they had watched and to read a book with the children in their care related to a program they had watched.

Preliminary findings also indicate that positive behaviors are sustained over time. Three months after attending a *Ready To Learn* workshop, 68 percent of parents report reading to their children at least once a day; six months after attending a workshop, 57 percent of parents are still reading to their children at least once a day. Three months after attending a *Ready To Learn* workshop, 43 percent of parents and early childhood educators report implementing the Learning Triangle (View-Read-Do) about once a week; six months after attending a workshop, 42 percent are still implementing the Learning triangle on a regular basis.

## Attention ZOOMers!

20 NEW EPISODES PREMIERE APRIL 19! The ZOOMers-veterans Mike, Shing Ying, and Kortney and newcomers Ernesto, Kyle, Cara, and Maya-begin a new season with some cool new segments and a zippy new Web site at <http://pbskids.org/zoom> Tune in on April 19 and watch the ZOOMers try out new science experiments, recipes, and games. New this year is our ZOOMout segment where ZOOMers leave the studio to pursue special interests and scientific investigations.

ANNUAL NATIONAL YOUTH SERVICE DAY ZOOM has partnered again with Youth Service America to get kids involved in the 16th Annual National Youth Service Day (April 16-18, 2004), the largest service event in the world! Between April 16-18, over three million young people, ages 5 to 25, will participate in tens of thousands of community service projects across the country. Looking for ways to get your kids to volunteer? Go to [http://pbskids.org/zoom/too/printable/volunteer\\_guide.pdf](http://pbskids.org/zoom/too/printable/volunteer_guide.pdf) where you'll find the ZOOM Into Action(tm) Family Guide to Volunteering and great tips for starting a volunteer project. Then add your hours of service to the ZOOM Team tally!

## New Characters Are Coming To Tarrytown Airport!

The Jay Jay The Jet Plane new character web voting campaign on the PBS Kids Jay Jay website was a major success, with the tally skyrocketing on a daily basis. The final total reached over 300,000 votes. And the winner, with over 100,000 votes, is... Montana, the adventurous female safari plane!

## Clifford's Puppy Days

Great news! We're tickled red to tell you that **CLIFFORD'S PUPPY DAYS**, the new pup on the PBS KIDS block, just received a Parents' Choice Approved seal. The Parents' Choice Approved seals are given on the basis of the production, entertainment and human values they exemplify. A Parents' Choice Approved seal indicates a wholesome product that helps children enjoy developing physical, emotional, social or academic skills.

Congratulations to Scholastic Entertainment, producers of **PUPPY DAYS**, for their great work on a pup-tacular show!

## FCI Unveils New Ready-to-Learn Workshop on Literacy

"Lullabies to Literacy: The Importance of Relationship," our newest training for child care providers, was presented to an enthusiastic audience at the PBS Ready-to-Learn conference in Baltimore, Maryland. The workshop focuses on helping caregivers understand the importance of their role in helping to nurture emergent literacy skills in young children.

Using Video clips from [Mister Rogers' Neighborhood](#) as well as documentary material of adults and children engaged in lap games and lullabies, this training workshop helps adults understand how their relationships with children are vital in helping children develop language, appreciate books and reading, and learn to write. These same messages of the importance of relationship to children's growth and self-esteem are the core of our [Neighborhood library](#).

### **American Idol intersects with Sesame Street!...**

#### **GUEST CELEBRITIES APPEARING IN SESAME STREET'S 35TH SEASON**

*See below for information on guest celebrities who've been scheduled to date to appear in upcoming Sesame Street shows:*

Bill Irwin – As Mr. Noodle – Show 4057

Natalie Portman – Play Natalie, assisting in Hooper's Store – Show 4060

Andrea Martin – As Cinderella's Fairy Godmother – Show 4061

Harvey Fierstein – Sings "Everything's Coming up Noses" – Show 4063

Julianne Moore – In "Far From Seven" – Show 4065

**Ruben Studdard – Sings "Soul Alphabet" with Elmo – Show 4066**

Carl Gordon – As Mr. Robinson – Show 4067

Venus Williams – In "Imaginary Champion" with Elmo – Show 4068

Martina McBride – Sings "That's Pretending" – Show 4072

Seth Green – Plays Vinnie the Delivery Guy from The Letter of the Month Club – Show 4074

Dr. Phil – In "Dr. Phil Meets Dr. Feel" – Show 4077

Larry King – In "Larry King Meets W" – Show 4079

Norah Jones – Sings "Don't Know Why Y Didn't Come" – Show 4081

In addition, "Dance Myself To Sleep," a star-studded music video, features guest celebrities performing their own dances, intercut with footage from the classic original Bert and Ernie "Dance Myself To Sleep" sketch. Among the celebrities appearing are Lily Tomlin, Whoopi Goldberg, Doris Roberts, Stockard Channing, Joshua Bell, Allison Janney, Ruben Studdard, Harvey Fierstein, Seth Green, and Julianne Moore. This segment appears in Show 4057.

**IN THE COMMUNITY**



**How To Make An Apple Pie and See the World by Marion Priceman**  
 (Alfred A. Knopf, Inc., New York, NY, 1994)

Smell the fragrance of apples and cinnamon wafting toward you. Picture an enormous apple pie just waiting to be tasted. That just what happened to a young man named Jordan recently. Ready To Learn trainer Dr. Merle Price created a Read-View-Do activity using the book “How To Make An Apple and See The World” and the Reading Rainbow clip of the story with her grandson Jordan. Check out the results!

Below are comments from a recent workshop featuring “How To Make An Apple Pie and See The World” conducted by Emily Castleberry, Pamela Hines and Dr. Ronald Plummer.

“[I received] a lot of great ideas.”

“I enjoyed the session tremendously and got a lot of ideas and information.”

When asked what did participants find practical and useful:

“Making a kit to take back to the classroom”

“Having resource—Internet and television to help with the children”

“Thanks for the information on copyright laws.”

“All can and did participate in the activities, and the book sharing was great!”

“Complete set of lesson plans for the apple pie book”

“The integration of literacy into science and social studies—easy and great ideas “

“Ideas for the use of media clips to introduce or highlight sections—I have never done before, but I will now!”