

## التعلم في البيت الصف الثاني

### أعزائى آباء وتلاميذ الصف الثاني،

إننا نواجه أوقاتاً عصيبة وغير اعتيادية حالياً حيث تغلق بعض المدارس لمدة أسبوع. وإننا ندرك بأن الإجازة في المدرسة قد تشكل تحدياً بالنسبة لكم ولعائلاتكم. وحتى وإن كانت مدرستكم مغلقة، فإن هذا الوقت يمكن استغلاله لمتابعة التعلم.

في الصفحات التالية، سوف تجدون إرشاداً يومياً لمساعدة طفلكم في البقاء منخرطاً. وهي تتضمن جدولاً وأنشطة وبرامج تلفازية ومواقع إلكترونية تعليمية مقترحة. الرجاء استعمال هذا الإرشاد وملء الجدول كل يوم بما يحدد تعلمكم اليومي.

سوف تتطلب كل هذه الأنشطة إشرافاً من أحد البالغين.

للحصول على المزيد من الموارد الإلكترونية والمواد المحدثة، توجهوا إلى الموقع الإلكتروني: http://schools.nyc.gov/learnathome.

Learn at Home: Grade 2

### Day 1 Schedule

Subject	Minutes Per Day (At Least!)	Assignments	What Did I Learn Today?
Reading and Writing	45	<ul> <li>Learn new vocabulary words from the Vocabulary List</li> <li>Activity 1: Reading</li> <li>Activity 2: Writing</li> </ul>	•
Math	45	Complete at least one: <ul><li>Fill it Up activity</li><li>Money's Worth activity</li></ul>	•
Science	30	Complete at least one of the following activities:  • Activity 1: Volcanoes (English or Spanish)  • Activity 2: How are Rocks Different?	•
Fitness and Health	30	Exercise for 30 minutes. Choose from the Activity Calendars at the back of this packet	•
Arts	30	Choose one or two activities from the Arts Activities at the back of this packet	•
TV Shows and Websites	30	Choose TV shows and websites to further your learning at home	•

### Day 1 Reading and Writing

### Vocabulary

Create your own picture dictionary. Each day this week, write new words you learn (from reading, listening, talking, or the Vocabulary List in the back of this packet) next to the appropriate letter. Draw a picture of each word. Review your dictionary every day to see how the list of words is growing! You can use the handout in the following pages to create your picture dictionary or you can use a notebook or separate sheets of paper.

### **Activity 1: Reading**

•	Read a book with your family. Write the title and author below:	
Title:		
Autho	or:	
•	Who is the main character in the story? (The main character is the person the story	is about)
•	How does the story begin?	
•	How does the story end?	
•	What is the most important event that happened in the story?	
	<del></del>	

### Day 1 Reading and Writing (continued)

### **Activity 2: Writing**

• You are going to write a story about the kitchen in your house. (A kitchen is the room in your home where meals are cooked or prepared).



As you look into your kitchen, think about the following:

- What do you see?
- Who is in the kitchen?
- What do you usually do in your kitchen?

n the first paragraph, write	some sentences a	bout how the kit	chen looks.		
n the second paragraph, w	rite some sentence	es that tell what y	ou do in the kitch	en.	

### **Day 1 Reading and Writing (continued)**

In the third paragraph, write some sentences that tell how the kitchen smells.			

### **Day 1 Mathematics**

### Vocabulary

Learn the new math vocabulary words below. You will use these vocabulary words in the activities today.

- **Estimate** When you estimate the answer to a problem it means that you give a pretty good guess at what the answer will be.
- **Savings** The sum (amount) of money saved.

### Choose one of the following activities:

### Activity 1: Fill It Up

• Filling empty containers provides opportunities to explore comparisons, measurement, volume, estimation, and geometry. Complete the Activity on the following pages.

### Activity 2: Money's Worth Activity

Coin games help children to learn the value of coins. They also teach counting, addition, subtraction, and multiplication. Coupons can help teach children money management, as well as subtraction and percentages.

If you need Spanish activities for the concept of measurement, please follow the steps below.

- 1. Go to tutorial site: <a href="http://destination.nycenet.edu">http://destination.nycenet.edu</a>
- 2. Login with the following user ID and PW:
  - User: studentnyc
  - Password: student
- 3. Click on the Exploration Icon to access the tutorial
- 4. Scroll down to Mastering Skills & Concepts: Course I Spanish
- 5. Select the skill/concept to review:
  - Activity 1: 3.1.4 Money

Source: These activities are from math.com

http://www.math.com/parents/articles/mathhome.html http://www.math.com/parents/articles/funmath.html

### **Day 1 Mathematics (continued)**

#### Fill It Up

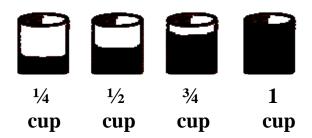
#### What you'll need

A measuring cup, 4 glasses of equal size, and water

#### What to do



- 1. Pour water at different levels ( 1/3 cup, 1/2 cup, 3/4 cup and 1 cup) in each glass. Put the glasses next to each other. Ask your child: Are all the water levels the same or different?
- 2. Ask your child questions to encourage comparison, estimation, and thinking about measurement. Which glass has more water? Which has less? How many glasses of water do you estimate it will take to fill the container?
- 3. Pour more water into one of the glasses to make it equal to the amount of water in another glass. Move the glasses around so that the glasses that have the same amount of water are not next to each other. Ask your child: Which glasses do you think have the same amount of water?
- 4. As your child begins to understand more, do activities using different-shaped containers that hold the same amount of a substance (water, rice, and popcorn kernels). This helps your child see comparisons, as well as the various capacities of different-sized and -shaped containers.



### **Day 1 Mathematics (continued)**

#### Money's Worth

#### What you'll need

Coins, grocery store coupons, and a pencil

#### What to do

- 1. **Coin clues**. Ask your child to gather some change in his or her hand without showing what it is. Start with amounts of 25 cents or less (for first-graders, you can start with pennies and nickels). Ask your child to tell you how much money and how many coins there are. Guess which coins are being held. For example, "I have 17 cents and 5 coins. What coins do I have?" (3 nickels and 2 pennies).
- 2. **Clip and save**. Cut out grocery store coupons and tell how much money is saved with coins. For example, if you save 20 cents on detergent, say 2 dimes. Ask your child what could be purchased using the savings from the coupon. A pack of gum? A pencil? How much money could be saved with 3, 4, or 5 coupons? How could that money be counted out in coins and bills? What could be purchased with those savings? A pack of notebook paper? A magazine? How much money could be saved with coupons for a week's worth of groceries? How would that money be counted out? What could be purchased with those savings? A book? A movie ticket? What percentage of the original price is the coupon worth?
- 3. **Count the ways**. How many ways can you make 10 cents, 25 cents, 30 cents, 40 cents, or 50 cents? You can help your child add the coins in various ways to get different answers.
- 4. Try playing the coin games with coins from another country.



### **Day 1 Science**

### Choose one of the following activities:

### Activity 1: Volcanoes (English or Spanish)

### Vocabulary

Learn the new science vocabulary words below. You will use these vocabulary words in today's activity.

- acid rain (noun): dirty air mixed with water in the air; it is bad for plants and people
- cough (verb): to quickly push air out of the mouth
- **protea** (noun): a plant that lives in Hawaii; it has hard leaves and colorful flowers
- **sulfur dioxide** (noun): a gas; it is bad for people
- volcano (noun): an opening in the earth through which gases come out

#### **Directions**

- Read the article below and answer the questions that follow.
- Para Espanol, prime aquí: <a href="http://SCHOOLS.NYC.GOV/Documents/teachandlearn/LearnatHome/ELL/2day1sp.pdf">http://SCHOOLS.NYC.GOV/Documents/teachandlearn/LearnatHome/ELL/2day1sp.pdf</a>

#### **Volcano Causing Problems for People, Plants**

HONOLULU, Hawaii (Achieve 3000, May 6, 2008).

Kilauea is a volcano on Hawaii's "Big Island." For years, it has been blowing up. It sends sulfur dioxide into the air. The sulfur dioxide mixes with dust and sunlight. This makes something called "vog."

Vog is bad for some people. It can make them cough. It can give them headaches. People are careful to stay inside. Schools keep kids inside during playtime.

Vog is causing other problems, too. Some plants and flowers are dying. They might be dying from the sulfur dioxide. Or it might be something else. Vog mixes with water in the air. This makes acid rain. The acid rain might be killing the plants.

Protea is one of the flowers being killed. Protea are grown on many farms in Hawaii. Farmers sell these flowers. With this and other plants dying, farmers are losing money. Many are thinking about growing different crops.

Information for this story came from AP.

### **Day 1 Science (continued)**

Buy I science (continued)
<ul> <li>Question 2: Since flowers and other plants are dying, then</li> <li>1. Kids do not have playtime.</li> <li>2. Kids stay inside at school.</li> <li>3. Farmers are selling flowers.</li> <li>4. Farmers are losing money.</li> </ul>
<ul> <li>Question 3: The news story says: Schools keep kids inside during playtime.</li> <li>Which must mean the opposite of inside?</li> <li>1. Above</li> <li>2. Under</li> <li>3. Outside</li> <li>4. Everywhere</li> </ul>
<ul> <li>Question 4: The news story does not say</li> <li>1. Acid rain helps protea.</li> <li>2. Vog is bad for some people.</li> <li>3. Acid rain may kill plants.</li> <li>4. Vog can cause problems.</li> </ul>
<ul> <li>Question 5: Let's say you are retelling this news story. Which is most important to say?</li> <li>Hawaii has an island called the "Big Island."</li> <li>Protea flowers are grown on farms.</li> <li>Vog is causing problems in Hawaii.</li> <li>Hawaii has many different farms.</li> </ul>
<ul> <li>Question 6: The news story says: Vog is causing other problems, too. Some plants and flowers are dying.</li> <li>Which must mean almost the same as problems?</li> <li>Troubles</li> <li>Papers</li> <li>Tickets</li> <li>Puddles</li> </ul>
Question 7: The news story says: For years, it has been blowing up. It sends sulfur dioxide into the air. The sulfur dioxide mixes with dust and sunlight.  These sentences help the reader to know  1. What volcanoes look like 2. How vog is made 3. How big volcanoes are 4. Why Kilauea is blowing up
<ul><li>Question 8: Which of these is an opinion?</li><li>1. Acid rain might be killing the plants.</li></ul>

Kilauea is a volcano in Hawaii.
 Protea are grown on many farms.

4. Farmers should still grow protea.

### **Day 1 Science (continued)**

### **Thought Activity**

Protea flowers are dying. It may be from vog or acid rain. Farmers might grow different crops. Is that a good idea? Tell why or why not. Look at the news story for help. Use your own ideas, too.

Write your answer below.	
,	

Achieve3000(www.kidbiz3000.com)

### **Day 1 Science (continued)**

### Activity 2: How Are Rocks Different?

### Vocabulary

Learn the new science vocabulary words below. You will use these vocabulary words in today's activity.

- **Texture:** the feel or appearance of the surface of an object
- Luster: the amount of light that an object reflects
- Reflect: the redirection of light that hits an object
- Mass: the amount of matter in an object

#### **Directions**

- This activity helps students to understand that there are a many different types of rocks.
- The parent should read through the activity and collect six (6) different rocks and work with your child as he or she conducts the experiment.

### How are Rocks Different?

ologist			Date	<del></del>	
Rock	Colors	Feel	Shiny or	Size (cm)	Mass (g)
		(texture)	dull (Luster)		

Thanks to Sandra Jenoure, NYCDOE Science Consultant, for the use of her work.

Learn at Home: Grade 2

### Day 2 Schedule

Subject	Minutes Per Day (At Least!)	Assignments	What Did I Learn Today?
Reading and Writing	45	<ul> <li>Learn new vocabulary words from the Vocabulary List</li> <li>Activity 1: Reading</li> <li>Activity 2: Writing</li> </ul>	•
Math	45	<ul><li>Complete at least one:</li><li>In the News activity</li><li>What are the Coins? activity</li></ul>	•
Science	30	Complete at least one of the following activities:  • Activity 1: Hawaii Fire Show (English or Spanish)  • Activity 2: Lost Rock	•
Fitness and Health	30	• Exercise for 30 minutes. Choose from the Activity Calendars at the back of this packet	•
Arts	30	Choose one or two activities from the Arts Activities at the back of this packet	•
TV Shows and Websites	30	Choose TV shows and websites to further your learning at home	•

### Day 2 Reading and Writing

### Vocabulary

Learn new words (from reading, listening, talking or the Vocabulary List in the back of this packet) and add them to the picture dictionary you started on Day 1.

Visit the community library or your home book collection. Choose 2 different books you think are

### **Activity 1: Reading**

interesting. Write the title of the 2 books you chose.
Title of Book 1:
Title of Book 2:
• After you read the books, find one new word from each book you find interesting or challenging. List the 2 words you found.
Example: gigantic
1
• What do you think each word means? (Example: I think the word gigantic means big or huge.)  1
2
• Write two sentences using the words. (Example: The very tall building next to my school is gigantic.)
1

Day 2 Reading and Writing (continued)
2.
Activity 2: Writing
<ul> <li>You are going to write a story about your favorite animal. Before you begin, make a list of words that describe your toy.</li> </ul>
Example: My favorite toy is a stuffed bear.
My bear is brown and has soft fur. It is furry, fluffy, and huggable

### Day 2 Reading and Writing (continued)

Now write your story using your list. Be sure to:

- Write a good title
- Write a good beginning
- Make sure your story has a beginning, middle, and end and the events are in order
- Include details about the setting, characters, and their problems
- Finish your story by telling how the problem was solved and how the story ends

itle:	-
<ul> <li>Read your story out loud to someone in your family.</li> </ul>	

### **Day 2 Mathematics**

### Vocabulary

Learn the new math vocabulary words below. You will use these vocabulary words in the activities today.

- **Counting Numbers** The numbers used to count things. The set of counting numbers is (1, 2, 3, 4...)
- Quarter 25 cents; Dime 10 cents; Nickel 5 cents.

### Choose one of the following activities:

### Activity 1: In the News

• This newspaper activity helps children read and understand numbers and charts. Complete the Activity on the following pages.

### Activity 2: What Are the Coins?

• Use this activity to help your child develop an understanding of patterns and variables (the unknown) to solve a problem. This is critical to understanding algebra.

If you need Spanish activities for the concept of measurement, please follow the steps below.

- 1. Go to tutorial site: <a href="http://destination.nycenet.edu">http://destination.nycenet.edu</a>
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  - User: studentnyc
  - Password: student
- 3. Click on the Exploration Icon to access the tutorial
- 4. Scroll down to Mastering Skills & Concepts: Course I Spanish
- 5. Select the skill/concept to review:
  - Activity 2: 3.1.3 Clock and Calendar Time

Source: These activities are from math.com

http://www.math.com/parents/articles/mathhome.html http://www.math.com/parents/articles/funmath.html

### Day 2 Mathematics (continued)

#### In the News

#### What you'll need

Newspaper, scissors, pencil or crayon, glue, and graph paper

#### What to do

1. **Newspaper numbers.** Help your child look for numbers 1 to 100 in the newspaper. Cut the numbers out and glue them in numerical order onto a large piece of paper. For children who cannot count to 100 or recognize numbers that large, only collect up to the number they do know. Have your child say the numbers to you and practice counting up to that number.

Or

- 2. Collect only numbers within a certain range, like the numbers between 20 and 30. Arrange the numbers on a chart, grouping all the numbers with 2s in them, all the numbers with 5s, and so on.
- 3. **Counting book.** Cut out pictures from the newspaper and use them to make a counting book. Page 1 will have one thing on it, page 2 will have 2 things that are alike, page 3 will have 3 things that are alike, and so on. All the things on the each page have to be the same. At the bottom of each page, write the number of items on the page and the word for the item. Have your child tell you a story about what is on the page.



### **Day 2 Mathematics (continued)**

#### What Are the Coins?

# What you'll need Some coins What to do Ask your child the following questions:

2. I have three coins in my pocket. They are worth 16 cents. What do I have? (a dime, a nickel, a penny)

1. I have three coins in my pocket. They are worth 7 cents. What do I have? (a nickel and 2 pennies)

- 3. I have three coins in my pocket. They are worth 11 cents. What do I have? (2 nickels and 1 penny)
- 4. I have three coins in my pockets. They are worth 30 cents. What do I have? (3 dimes)
- 5. I have six coins in my pocket. They are worth 30 cents. What could I have? (1 quarter and 5 pennies or 6 nickels). This problem has more than one answer. It is challenging for children to experience problems like this.
- 6. I have coins in my pocket, which have a value of 11 cents. How many coins could I have?

You get the idea! Give your child a few coins to figure out the answers.

### Day 2 Science

### Choose one of the following activities.

### Activity 1: Hawaii Fire Show (English or Spanish)

### Vocabulary

Learn the new science vocabulary words below. You will use these vocabulary words in today's activity.

- **erupt** (verb): to burst out
- gas (noun): something like air that can't be seen or touched
- lava (noun): melted rock flowing from a volcano
- ocean (noun): a very large body of water
- shield volcano (noun): a kind of volcano that has lava coming out of the sides, not the top

#### **Directions**

- Read the article below and answer the questions that follow.
- Para Espanol, prime aquí: http://SCHOOLS.NYC.GOV/Documents/teachandlearn/LearnatHome/ELL/2day2sp.pdf

#### Hawaii's Fire Show

KALAPANA, Hawaii (Achieve 3000, March 28, 2008). Many people are visiting Hawaii. They are going to Volcanoes National Park. About 9,000 people visit every day. Why? They hope to see Kilauea erupt.

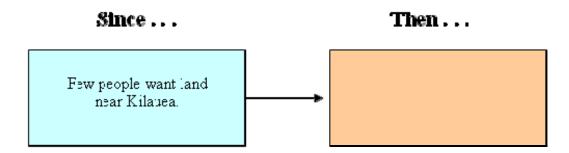
Kilauea is a shield volcano. That means that lava comes out of holes in its sides. The lava moves very slowly. People who live nearby have time to get away.

In March 2008, Kilauea erupted. Lava made a big path down to the ocean. It burned through homes. No one lived in the homes. About a week later, gas blew out of the volcano. Small rocks blew out, too. The last time this happened was 1924.

About 8,500 people live near the bottom of Kilauea. They were able to buy the land for very little money. Why? Few people want the land. Homes built there can be burned by moving lava. No one knows when the volcano will erupt next.

Information for this story came from AP.

### **Day 2 Science (continued)**



**Question 1:** Which fits best in the empty box above?

- 1. People nearby have time to get away.
- 2. People built homes closer to the ocean
- 3. People bought land for little money.
- 4. People visited Hawaii to see Kilauea.

#### **Question 2:** Which of these is an opinion?

Hint: An opinion tells what a person thinks or feels. Others may not think this is right.

- 1. Many people like to see Kilauea erupt.
- 2. Building near a volcano is a bad idea.
- 3. No one knows when volcanoes will erupt.
- 4. About 8,500 people live near Kilauea.

#### **Question 3:** Which word means almost the same as erupt?

- 1. Knock
- 2. Move
- 3. Push
- 4. Blow

#### **Question 4:** Which question is not answered by the news story?

- 1. Where is Volcanoes National Park?
- 2. Why are people visiting the park?
- 3. What kind of volcano is Kilauea?
- 4. When will Kilauea erupt next?

#### **Question 5:** What is the big idea of this news story?

- 1. Many people want to see the ocean.
- 2. Many people want to see Kilauea.
- 3. Many people want to see Hawaii.
- 4. Many people want to see a park.

#### **Question 6:** Which word means almost the same as rocks?

- 1. Blocks
- 2. Stones
- 3. Glass
- 4. Piles

### **Day 2 Science (continued)**

**Question 7:** Let's say you are retelling this news story. Which is most important to say?

- 1. People like to watch Kilauea erupt.
- 2. Rocks blew out of the volcano.
- 3. People bought land for little money.
- 4. Kilauea erupted in 1924.

**Question 8:** The news story says: Many people are visiting Hawaii. They are going to Volcanoes National Park. About 9,000 people visit every day.

What does this show?

- 1. Why many houses get burned.
- 2. How many people like to watch Kilauea.
- 3. Why many people live in Hawaii.
- 4. How many volcanoes are found in Hawaii.

#### **Thought Question**



Let's say you go to Hawaii. You see Kilauea. Write a story about it. Tell what you see, hear, and feel. Look at the news story for help. Make up your own ideas, too. Write your answer below.

A 1: 2000	

Achieve3000

### **Day 2 Science (continued)**

### **Activity 2:** Lost Rock

### Vocabulary

Learn the new science vocabulary words below. You will use these vocabulary words in today's activity.

- **Texture:** the feel or appearance of the surface of an object
- Luster: the amount of light that an object reflects
- **Reflect:** the redirection of light that hits an object
- Mass: the amount of matter in an object

#### **Directions**

• Use your imagination and your descriptive vocabulary to complete a writing assignment. Describe one of the rocks from the Day 1 science activity. Ask your parent or caretaker to read what you write to see if they can select the rock that you described from the rocks that were used in the Day 1 activity.



Thanks to Sandra Jenoure, NYCDOE Science Consultant, for the use of her work.

### Day 3 Schedule

Subject	Minutes Per Day (At Least!)	Assignments	What Did I Learn Today?
Reading and Writing	45	<ul> <li>Learn new vocabulary words from the Vocabulary List</li> <li>Activity 1: Read a Poem</li> <li>Activity 2: Write and Share a Poem</li> </ul>	•
Math	45	Complete at least one:  • Guess If You Can activity  • Tracking Time activity	•
Science	30	Complete at least one of the following activities:  • Activity 1: Water Cops (English or Spanish)  • Activity 2: Bubble Wands	•
Fitness and Health	30	Exercise for 30 minutes. Choose from the Activity Calendars at the back of this packet	•
Arts	30	Choose one or two activities from the Arts Activities at the back of this packet	•
TV Shows and Websites	30	Choose TV shows and websites to further your learning at home	•

### Day 3 Reading and Writing

### Vocabulary

Learn new words (from reading, listening, talking, or the Vocabulary List in the back of this packet) and add them to the picture dictionary you started on Day 1.

### Activity 1: Read a Poem

• Read the poem below.

#### I'm the Single Most Wonderful Person I Know, By Jack Prelutsky

I'm the single most wonderful person I know, I'm witty, I'm charming, I'm smart, I'm often so brilliant I actually glow, I'm a genius in music and art.

I'm super, I'm splendid, I'm stunning, I'm strong, I'm awesome, I'm dashing, I'm bold, I know all the answers, it's rare that I'm wrong, I am absolute joy to behold.

I'm strikingly handsome, I'm thoroughly grand, I'm uncategorically clever,
There's only one thing that I can't understand -Why nobody likes me. . . not ever!

Circle all the words in the poem that are descriptive (or that tell about the person). Are there	any words in the	e
poem that also describe you? What are they?	•	

What happens in the poem at the end? Why do you think the person in the poem isn't liked?

### Activity 2: Write and Share a Poem

- After reading the poem, write as many words as you can to describe yourself.
- Write an all about me poem using your list of describing words. Don't forget a title.
- Share your poem with your family

### **Day 3 Mathematics**

### Vocabulary

Learn the new math vocabulary words below. You will use these vocabulary words in the activities today.

- Counting by... "Counting by" is to skip count.
- One day 24 hours; One hour 60 minutes; Half hour 30 minutes

### Choose one of the following activities:

### Activity 1: Guess If You Can

• It is important to help children develop an understanding of the characteristics and meanings of numbers. Complete the Activity on the following pages.

### **Activity 2: Tracking Time**

• Statistics includes collecting information, analyzing it, and describing or presenting the findings in an organized way.

If you need Spanish activities for the concept of number sense and operations, please follow the steps below.

- 1. Go to tutorial site: <a href="http://destination.nycenet.edu">http://destination.nycenet.edu</a>
- 2. Login with the following user ID and PW:
  - User: studentnyc
  - Password: student
- 3. Click on the Exploration Icon to access the tutorial
- 4. Scroll down to Mastering Skills & Concepts: Course I Spanish
- 5. Select the skill/concept to review:
  - Activity 3: <u>1.3.3 Counting from 50 to 100</u>

Source: These activities are from math.com

http://www.math.com/parents/articles/mathhome.html http://www.math.com/parents/articles/funmath.html

### **Day 3 Mathematics (continued)**

#### **Guess If You Can**

#### What to do

1. Let your child think of a number between a stated range of numbers while you try to guess the number by asking questions. Here is a sample conversation.

2. **Child**: I am thinking of a number between 1 and 100.

**Parent**: Is it more than 50?

Child: No.

Parent: Is it an even number?

Child: No.

**Parent**: Is it more than 20 but less than 40?

Child: Yes.

Parent: Can you reach it by starting at zero and counting by 3's?

Child: Yes.

(At this stage, your child could be thinking of 21, 27, 33, or 39.)

3. Figure out the answers to your own questions.

4. After you have guessed your child's number, let your child guess a number from you by asking similar questions.

### **Day 3 Mathematics (continued)**

#### **Tracking Time**

#### What you'll need

Clock or watch, newspaper, blank paper, and graph paper (can be hand-drawn)

#### What to do

- 1. Together with your child, keep track of the time he or she spends watching television as well as doing homework. Make a table listing the 7 days of 1 week. Keep two columns, one for television and one for homework. At the end of the week, see if together you can make a graph comparing the two different activity columns.
- 2. While watching television, make a chart showing how much time in every hour is used for commercials compared to how much time is used for the actual show. Do this for every half-hour of television you watch. Then make a bar or pie chart showing the two amounts. Time the minutes carefully.
- 3. Together with your child, keep track of how he or she spends time in one 24-hour period: time spent sleeping, eating, playing, reading, and going to school. Measure a strip of paper that is 24 inches long. Let each inch represent 1 hour. Color in the number of hours for each activity, using a different color for each activity. When finished, make the strip into a circle and place it on a blank piece of paper. Trace around the circle. Then make lines from the center of the circle to the end of each color. Your child has just made a circle (pie) chart of how he or she spends 24 hours. Compare this with how other people in your family spend their time.



### Day 3 Science

### Choose one of the following activities.

### Activity 1: The Water Cops (English or Spanish)

### Vocabulary

Learn the new science vocabulary words below. You will use these vocabulary words in today's activity.

- **conserve** (verb) to save or use less
- **drought** (noun) a time when things are very dry and there is no rain
- **officer** (noun) a member of the police
- **precious** (adjective) of high cost or worth

#### **Directions**

- Read the article below and answer the questions that follow.
- Para Español clique aquí: http://SCHOOLS.NYC.GOV/Documents/teachandlearn/LearnatHome/ELL/2day3sp.pdf

#### The Water Cops

LOS ANGELES, California (Achieve3000, February 20, 2009). There's a new group of police officers in Los Angeles, California. They're called "water cops." And they're looking for careless gardeners. The water police make sure that people don't waste water. California is struggling with a drought. Therefore, conserving water is more important than ever.

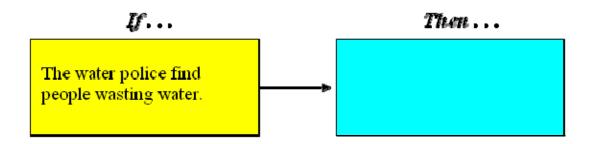
Water is precious everywhere. But this is very true where there is a not enough of it. In June 2008, California Governor Arnold Schwarzenegger declared a statewide drought. Why? The state has had little rain or snow over the past two years.

Los Angeles is California's largest city. With so many people, Los Angeles must look for ways to conserve water. The city has 15 water police officers. They travel around the city's neighborhoods looking for people who are wasting water. How do people waste water? Some people water their yards. Others wash their driveways. Some people even empty and fill their swimming pools.

What happens to those who are caught wasting water? They can be given a warning. Or they can be made to pay fines. These fines show up on water bills. The fines start at \$100.

Information for this story came from AP.

### **Day 3 Science (continued)**



**Question 1:** Think about the news story. Which fits best in the empty box above?

- 1. The police could make the people pay money.
- 2. The police could turn off the people's water.
- 3. The police could ask the people to move away.
- 4. The police could empty the people's pools.

#### **Question 2:** What is the big idea in this news story?

- 1. Los Angeles water police look for people who waste water.
- 2. Los Angeles is the largest city in the state of California.
- 3. California has had little rain or snow for the past two years.
- 4. Most places in California are trying to conserve water.

**Question 3:** The news story says: How do people waste water? They water their yards. They wash their driveways. Some people even empty and fill their swimming pools.

What does this show?

- 1. Some ways that people waste water
- 2. Why people water their yards
- 3. Why people wash their driveways
- 4. Some reasons that people have pools

**Question 4:** Which two words from the news story have opposite meanings?

- 1. Empty and fill
- 2. Wash and travel
- 3. Give and waste
- 4. Find and conserve

**Question 5:** Which is not talked about in the news story?

- 1. Some people are putting in bird baths.
- 2. Some people water their yards.
- 3. Some people wash their driveways.
- 4. Some people fill their swimming pools.

**Question 6:** Let's say you are retelling this news story. It is most important to say that \_\_\_\_\_\_.

- 1. The city of Los Angeles is trying to conserve water.
- 2. The largest city in California is Los Angeles.
- 3. Many people live in the city of Los Angeles.
- 4. Many people in Los Angeles have swimming pools.

### **Day 3 Science (continued)**

**Question 7:** Which means almost the same as conserving?

- 1. Saving
- 2. Running
- 3. Filling
- 4. Buying

**Question 8:** Think about the news story. Which is most likely to happen?

- 1. The water police will keep looking for people who waste water.
- 2. Most people in Los Angeles will stop using their swimming pools.
- 3. The water police will start giving warnings to people who save water.
- 4. Most people in Los Angeles will never want to wash their driveways.

#### **Thought Question**

Let's say you are a water cop in Los Angeles. How do you feel about your job? Use facts from the news story in your answer. Use your own ideas, too. Write your answer below.			
	7		

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### **Day 3 Science (continued)**

### **Activity 2:** Bubble Wands

This activity will help you to create different shapes using pipe cleaners and see how these shapes affect the bubbles that you blow through the shapes. Your parent or caregiver should read through the activity and work with you as you conducts the experiment.

### Vocabulary

Learn the new science vocabulary words below. You will use these vocabulary words in today's activity.

- Wand: a thin stick or rod that can be waved in the air
- **Bubble:** a thin dome-shaped film of soap and water that is filled with air
- **Solution:** two or more liquids mixed together

#### **Directions**

- 1. Take a pipe cleaner and bend it into any shape bubble wand you want.
- 2. Dip your bubble wand into the bubble solution.
- 3. Blow into your bubble wand.
- 4. What is the shape of your bubble?
- 5. Try it again.
- 6. Bend your pipe cleaner into another shape.
- 7. What is the shape of your bubble?
- 8. Try different shapes.
- 9. What is the shape of your bubble each time?











Thanks to Sandra Jenoure, NYCDOE Science Consultant, for the use of her work.

### **Day 4 Schedule**

Subject	Minutes Per Day (At Least!)	Assignments	What Did I Learn Today?
Reading and Writing	45	<ul> <li>Learn new vocabulary words from the Vocabulary List</li> <li>Activity 1: Reading</li> <li>Activity 2: Write Your Own Story</li> </ul>	
Math	45	<ul><li>Complete at least one:</li><li>Money Match activity</li><li>Problem Solvers activity</li></ul>	•
Science	30	Complete at least one of the following activities:  • Activity 1: Battle (English or Spanish)  • Activity 2: Ear Guitar	•
Fitness and Health	30	• Exercise for 30 minutes. Choose from the Activity Calendars at the back of this packet	•
Arts	30	Choose one or two activities from the Arts Activities at the back of this packet	•
TV Shows and Websites	30	Choose TV shows and websites to further your learning at home	•

### Day 4 Reading and Writing

### Vocabulary

Name that picture! Cut out 10 interesting pictures from magazines or newspapers and name what the pictures are with your parent or caregiver. Keep the pictures in a picture file and sort them into categories (e.g., people, foods, animals, places where people live, etc.) Write any new words you learn in your picture dictionary. Describe or paste your pictures into the chart below.

People	Animals	Foods	Places Where People Live

### Day 4 Reading and Writing (continued)

### Activity 1: Reading

	the book) below:	_
Title:_		
	or:	
•	Where does the story take place?	
•	How do you know? What words does the writer use that help you figure it out?	
•	When does the story take place?	
•	How do you know? What words does the writer use that help you know?	

• Read a book with your family. Write the title (the name of the book) and author (the person who wrote

# Day 4 Reading and Writing (continued)

## Activity 2: Write Your Own Story

questions:
Where will your story take place?
What would be a good way to start your story?
3. What would be a good way to end your story?
4. What details will be in the middle of your story?
4. What details will be in the initiale of your story.

You are going to write a story about your favorite place to play. Before you begin to write, answer these

# **Day 4 Reading and Writing (continued)**

5. What do you think you will name your story?				
Use the lines below and back of this paper or a separate sheet of paper to write your story.				

# **Day 4 Mathematics**

### Vocabulary

- Learn the new math vocabulary words below. You will use these vocabulary words in the activities today.
- **Sum** When adding numbers the sum is the answer.
- Value When adding numbers the value is the answer, the amount.

### Choose one of the following activities:

### **Activity 1:** *Money Match*

Counting money and batching in groups of 2's, 5's, or 10's teaches children matching skills and helps in the beginning stages of addition and multiplication. Children also learn how to identify coins and understand their values. Complete the Activity on the following pages.

### **Activity 2: Problem Solvers**

This card game helps children develop various ways to use numbers in different combinations and to see the many possibilities of arriving at the same sum by adding different sets of numbers.

If you need Spanish activities for the concept of number sense and operations, please follow the steps below.

- 1. Go to tutorial site: http://destination.nycenet.edu
- 2. Login with the following user ID and PW:
  - User: studentnycPassword: student
- i assword. Staden
- 3. Click on the Exploration Icon to access the tutorial
- 4. Scroll down to Mastering Skills & Concepts: Course I Spanish
- 5. Select the skill/concept to review:
  - Activity 1: 1.4.2 Comparing Numbers Within 100

Source: These activities are from math.com

http://www.math.com/parents/articles/mathhome.html http://www.math.com/parents/articles/funmath.html

# **Day 4 Mathematics (continued)**

#### **Money Match**

#### What you'll need

One number cube to roll; 10 of each coin (penny, nickel, dime, and quarter)



#### What to do

- 1. For young players (5 and 6 year olds) use only two different coins (pennies and nickels or nickels and dimes only). Older children can use all types of coins.
- 2. Explain that the object of the game is to be the first player to earn a set amount (10 or 20 cents is a good amount).
- 3. The first player rolls the number cube and gets the number of pennies shown on the cube. Keep all like coins in batches or stacks of 5 or 10.
- 4. As each player accumulates 5 pennies or more, the 5 pennies are traded for a nickel. Players take turns rolling the cube to collect additional coins.
- 5. The first player to reach the set amount wins.
- 6. Add the quarter to the game when the children are ready. As each player accumulates 5 nickels, they are traded for quarters.

# **Day 4 Mathematics (continued)**

#### **Problem Solvers**

#### What you'll need

Enough sets of cards so that each player has a set of cards numbered 1 through 6.

#### What to do

- 1. **Super sums**. Each player writes numbers 1-12 on a piece of paper. The object of the game is to be the first one to cross off all the numbers on this list. Use only the cards 1-6. Each player picks two cards and adds up the numbers on them. The players can choose to mark off the numbers on the list by using the total value or crossing off two or three numbers that make that value. For example, if a player picks a 5 and a 6, the player can choose to cross out 11, or 5 and 6, or 7 and 4, or 8 and 3, or 9 and 2, or 10 and 1, or 1, 2, and 8. If a player cannot cross off a number, the player loses the turn. The first player to cross off all the numbers wins.
- 2. **Make the sum of 100.**Use only cards 1-6. Each player takes turns drawing a card and each player must take 6 cards from the deck. With each draw, a player decides whether to use the number on the card in the 10s place or the 1s place so that the numbers total as close to 100 as possible without going over. For example, suppose a player draws the following cards in this order: 1, 6, 3, 2, 3, 2, and chooses to use the numerals in the following way:

# **Day 4 Science**

### Choose one of the following activities:

### Activity 1: A Water Battle (English or Spanish)

### Vocabulary

Learn the new science vocabulary words below. You will use these vocabulary words in today's activity.

- argue (verb) to give reasons for or against something
- **community** (noun) a place where a group of people live
- **environment** (noun) the air, water, land, and all living things
- **lumber mill** (noun) a place where trees are cut into boards
- review (noun) telling the good and bad points about something

#### **Directions**

- Read the article below and answer the questions that follow.
- Para Espanol, prime aquí: http://SCHOOLS.NYC.GOV/Documents/teachandlearn/LearnatHome/ELL/2day4sp.pdf

#### A Water Battle

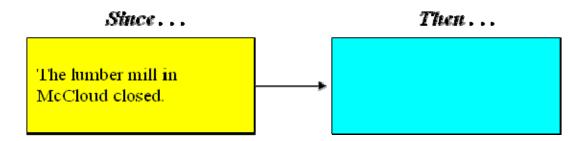
**MCCLOUD, California** (Achieve3000, May 9, 2008). McCloud is a small town in California. Once, it was a growing community. Then, its lumber mill closed. Many jobs were lost. Stores closed.

In 2003, McCloud planned to bring in new jobs. How? It would let Nestlé open the country's largest water bottling plant. Nestlé would bottle water from nearby springs and sell it.

Some people didn't like this idea. Why not? Nestlé might take too much water. This could hurt the plants, animals, and streams. Now, leaders must do a review. It will show if Nestlé would harm the environment.

McCloud isn't the only place <u>arguing</u> about bottling plants. Other cities are also.

Information for this story came from AP.



**Question 1:** Think about the news story. Which fits best in the empty box above?

- 1. Everyone moved away.
- 2. Nearby plants and animals died.
- 3. Many jobs were lost and stores closed.
- 4. A new water bottling plant was opened.

#### **Question 2:** What is this news story mostly about?

- 1. Nestlé may build a water bottling plant in McCloud, California.
- 2. McCloud, California, was once a growing community.
- 3. Many cities are arguing about water bottling plants.
- 4. McCloud is a small town in California.

#### **Question 3:** Which is not in the news story?

- 1. Leaders in McCloud must do a review.
- 2. McCloud planned to bring in new jobs in 2003.
- 3. Nestlé wants to bottle water from springs near McCloud.
- 4. Water bottling companies build plants in places with lots of trees.

#### **Question 4:** Which of these is an opinion?

Hint: An opinion tells what a person thinks or feels. Others may not think this is right.

- 1. Cities like McCloud are arguing about bottling plants.
- 2. McCloud planned to bring in new jobs in 2003.
- 3. Cities like McCloud should let bottling plants open.
- 4. McCloud is a small town in California.

**Question 5:** The news story says: [The review] will show if Nestlé would hurt the environment.

Which of these is not part of the environment?

- 1. Air
- 2. Land
- 3. Water
- 4. School

**Question 6:** Which question is not answered by the news story?

- 1. How does McCloud, California, plan to bring in new jobs?
- 2. What does Nestlé want to do with the water it bottles?
- 3. How much money can Nestlé make selling water?
- 4. Where is the town of McCloud?

Day i science (continued)	
Question 7: Think about the news story. The reader can tell that	
1. McCloud must be the only town with springs near it.	
2. Nestlé must hope to make money by selling bottled water.	
3. Bottling plants must always be safe for the environment.	
4. Most people in McCloud must work at the nearby lumber mill.	
Question 8:	
The news story says: Some people didn't like this idea. Why not? Nestlé might take too much water. This co	
hurt the plants, animals, and streams. Now, leaders must do a review. It will show if Nestlé would harm the	;
environment.	
Which must mean almost the same as harm?	
1. Hurt	
2. Finish	
3. Hold	
4. Follow	
Thought Question	
Nestlé might open a new water bottling plant. Some people like the idea. Some people do not. What do you think should happen?	l
Use facts from the news story in your answer. Use your own ideas, too.	
Write your answer below.	

Achieve3000 (www.kidbuz3000.com)

### **Activity 2:** Ear Guitar

This activity will help you to understand the vibrations that cause sound. Your parent/caregiver should read through the activity. Follow the directions below to conducts the experiment.

### Vocabulary

Learn the new science vocabulary words below. You will use these vocabulary words in today's activity.

- Sound: a vibration that travels through a solid, liquid or gas and can be hear by the ear
- **Vibration:** the process of moving back and forth

#### **Directions**

# **Ear Guitar**

#### Share some secret sounds with a friend.

#### **Materials:**

- nail
- two empty yogurt cups (you can also use two tin cans)
- scissors
- string
- bar of soap
- paper clips
- a friend, sibling or parent



### What do I need?

Use the nail to poke a hole in the center of the bottom of each yogurt cup. (If you use tin cans, have a grown-up make a hole with a hammer and the nail.)



With your scissors, cut a piece of string that's about 15 feet long.



Wet the bar of soap. Rub one end of the string on the soap, then roll the string in your fingers so it's pointy. Poke the end of the string through the hole into the cup.

### QUESTIONS:

- 1. Can you hear the sound through your "ear guitar"?
- 2. How do you think the sound is traveling?

Thanks to © The Exploratorium on www.exploratorium.edu for this experiment

# **Day 5 Schedule**

Subject	Minutes Per Day (At Least!)	Assignments	What Did I Learn Today?
Reading and Writing	45	<ul> <li>Learn new vocabulary words from the Vocabulary List</li> <li>Activity 1: Reading</li> <li>Activity 2: Writing</li> </ul>	•
Math	45	<ul> <li>Complete:</li> <li>Let's Play Store activity</li> <li>Simply Symmetrical activity</li> </ul>	•
Science	30	Complete at least one of the following activities:  • Activity 1: Living with Volcanos (English or Spanish)  • Activity 2: Reflecting Rainbows	•
Fitness and Health	30	• Exercise for 30 minutes. Choose from the Activity Calendars at the back of this packet	•
Arts	30	Choose one or two activities from the Arts Activities at the back of this packet	•
TV Shows and Websites	30	Choose TV shows and websites to further your learning at home	•

# Day 5 Reading and Writing

### Vocabulary

Learn new words (from reading, listening, talking, or the Vocabulary List in the back of this packet) and add them to the picture dictionary you started on Day 1.

## **Activity 1: Reading**

- Read a book with your family.
- Write the title and author below:

Author:
Make a list of interesting things you learned from the book.
• Write 3 to 5 sentences that summarize the story.
• Share your summary with your family. Ask them if they have questions about what you read. Write down 3 of the questions they asked and answer them.

# **Day 5 Reading and Writing (continued)**

# Activity 2: Writing

•	<ul> <li>You are going to write a story about your favorite toy. Before you begin, make a list of words that describe your toy. Think about why you like your toy. Think about how you play with it too.</li> </ul>				
Now v	write your story using your list:				
Title:_					

# Day 5 Reading and Writing (continued)

Draw a picture of y	our toy here.		

# **Day 5 Mathematics**

### Vocabulary

- Learn the new math vocabulary words below. You will use these vocabulary words in the activities today.
- **Estimate** When you estimate the answer to a problem it means that you give a pretty good guess at what the answer will be.
- + is the symbol used for adding and is the symbol used for subtracting.
- **Symmetrical** Having symmetry (or being symmetrical) means that something is a mirror image over a line in space.

### Activity 1: Let's Play Store

• Learning to use the calculator will help your child understand and apply estimation and reasoning skills, as well as learn addition, subtraction, division, and multiplication. Complete the Activity on the following page.

### Activity 2: Simply Symmetrical Activity

• A shape can be symmetrical when two parts of it are exactly alike. This exercise helps young children develop an understanding of symmetry and a sense of geometric patterns.

If you need Spanish activities for the concept of number sense and operations, please follow the steps below.

- 1. Go to tutorial site: <a href="http://destination.nycenet.edu">http://destination.nycenet.edu</a>
- 2. Login with the following user ID and PW:
  - User: studentnyc
  - Password: student
- 3. Click on the Exploration Icon to access the tutorial
- 4. Scroll down to Mastering Skills & Concepts: Course I Spanish
- 5. Select the skill/concept to review:
  - Activity 5: <u>2.1.4 Sums within 20</u>

Source: These activities are from math.com

http://www.math.com/parents/articles/mathhome.html http://www.math.com/parents/articles/funmath.html

# **Day 5 Mathematics (continued)**

#### **Let's Play Store**

#### What you'll need

Empty containers (cartons or boxes), old magazines, books, newspapers, calculator, pencil or crayon, and paper

#### What to do

- 1. Help your child collect empty containers so that you can play as if you were shopping at the grocery store. Gather the items and put them on a table.
- 2. Help your child think of a price for each item. Mark the prices on the containers. You can even mark some items on sale.
- 3. Pretend to be the customer while your child is the cashier.
- 4. Teach your child the difference between the math symbols (+, -, ÷, x, and =) and how they are used when using the calculator. Help your child add the prices of each item on the calculator and total the amount using the (=) symbol. Have your child write the total on a piece of paper, which will be your receipt.
- 5. While you and your child play store, you can ask questions like how much would it cost to buy three cartons of eggs? How much does 1 box of soap cost, if they are 2 for \$5.00? How much is my bill, if I don't buy the cereal? How much more will it cost if I buy this magazine? Have your child estimate the amounts of the items you are buying. Check to see if the estimation is correct on the calculator.

# **Day 5 Mathematics (continued)**

### **Simply Symmetrical**

#### What you'll need

Paper, pencil, marker or crayon, magazine pictures, scissors, and glue

#### What to do

- 1. Explore your house for symmetrical designs. See how many your child can find. Look at wallpaper, floor tiles, pictures, bedspreads, and appliances.
- 2. Cut out a magazine picture that is symmetrical. Cut it along the line of symmetry. Paste one half of the picture on the paper. Have your child draw the missing half.
- 3. Write your child's name in big block letters, then write your name. Which name has more letters with lines of symmetry? How many letters have one line of symmetry? How many of each letter have two? (a B has one line, an H has two). Does anyone have a name with all symmetrical letters? (BOB is one.) Can any letter be turned upside down and still look the same? (YesH, I, O, S, and X are symmetrical around a center point.) Go through the alphabet, making a list of the letters that look the same on both sides and those that look different.
- 4. Fold a sheet of paper in half lengthwise. Have your child draw half of a circle, heart, or butterfly from top to bottom along the fold on each side of the paper. Help your child cut out the shapes that were drawn. Unfold the paper to see the symmetrical figure. Have your child color and glue the full figure on another sheet of paper to display the design.

# Day 5 Science

### Choose one of the following activities.

### Activity 1: Living with Volcanoes (English or Spanish)

### Vocabulary

Learn the new science vocabulary words below. You will use these vocabulary words in today's activity.

- ash (noun): tiny pieces of dust that come out of a volcano
- **destroy** (verb): to wipe out
- **explode** (verb): to blow out with great force
- volcano (noun): an opening in the earth through which gases and rocks come out

#### **Directions**

- Read the article below and answer the questions that follow.
- Para Espanol, prime aquí: <a href="http://SCHOOLS.NYC.GOV/Documents/teachandlearn/LearnatHome/ELL/2day5sp.pdf">http://SCHOOLS.NYC.GOV/Documents/teachandlearn/LearnatHome/ELL/2day5sp.pdf</a>

#### Living with Volcanoes

BILBAO, Ecuador (Achieve3000, October 3, 2006). More than one-fourth of Ecuador's 12 million people live near active volcanoes. The nation has 55 volcanoes and seventeen of those are active. This means that they could explode at any time.

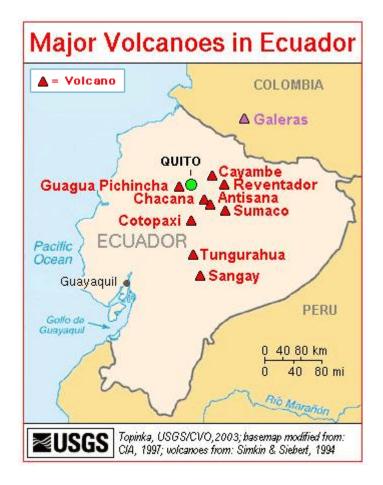
The Pululahua is a volcano. Many people would be hurt if it exploded. This is because there are farms very close to it. The volcano is active. Still, it has not exploded in 2,300 years. However, sometimes it trembles and roars "like a jet plane."

Tungurahua is another volcano. It means "throat of fire." It was the last volcano to explode. It wiped out 10 villages and left 5,000 people without homes. It destroyed the villagers' crops.

Many things can be hurt by volcanoes. Ecuador's two oil pipelines are only one mile apart. They pass by many volcanoes. An explosion could hurt both of them. In addition, explosions hurt roads. They stop airplanes from flying. Ash gets dumped on runways. It fills the air and makes it hard to see. It keeps people from visiting to see the volcanoes.

Some people in Ecuador are upset. They say that leaders in this country let people build schools and businesses near volcanoes. They want Ecuador's leaders to do more to keep people safe. Still, many people say that volcanoes are just a part of their way of life.

Information for this story came from AP.



Question 1: Look at the map above. Many volcanoes in Ecuador are found \_\_\_\_\_\_

- 1. In the south
- 2. Close to Peru
- 3. Near the Pacific Ocean
- 4. In the middle of the country

**Question 2:** What is the big idea in the news story?

- 1. Ecuador's crops
- 2. Ecuador's leaders
- 3. Ecuador's farms
- 4. Ecuador's volcanoes

**Question 3:** From the news story, the reader can tell that ...

- 1. It might not be safe to live near volcanoes.
- 2. Volcanoes only hurt villages.
- 3. It might not be safe to read about Ecuador.
- 4. Volcanoes only hurt cities.

	<b>restion 4:</b> Some people in the news story had nowhere to live. Why?
1.	Their homes were wiped out by a big wave.
2.	They came from another country.
3.	Their homes were wiped out by a volcano.
4.	They sold their homes and moved.
Qι	nestion 5: The news story says: Ten villages were wiped out.
	nen a village is wiped out, it is
	Gone
2.	Being built
	Waiting
	Far away
Qι	<b>nestion 6:</b> Think about the news story. Why are some people in Ecuador upset?
_	They do not like living on farms.
	They want leaders to do more to keep crops safe.
	They do not like living in cities.
	They want leaders to do more to keep people safe.
Οι	<b>restion 7:</b> The news story says: It has not exploded in 2,300 years.
_	hen something explodes, it
	Crawls
	Blows up
	Sleeps
	Turns over
Qι	<b>nestion 8:</b> The news story does not tell
_	The name of the country where the people lived
	What happened to people's crops
	The names of the volcanoes that exploded

4. What can be hurt by volcanoes

### **Thought Question**

Imagine that you live in Ecuador. What does your family do for a living, and how is your way of life affected b	y
volcanoes? How can your family make the best of this situation? Use ideas from the article, as well as some of	
your own, in your response. Type your answer below.	


Achieve3000

### **Activity 2: Reflecting Rainbows**

This activity will help you understand the reflective properties of light. Your parent or caregiver should read through the activity with you. Follow the directions below to conducts the experiment.

### Vocabulary

Learn the new math vocabulary words below. You will use these vocabulary words in the activity today.

- **Reflect**: the redirection of light that hits an object
- Pattern: a repeated shape or marking

# Reflecting Rainbows

Decorate your white walls with rainbow colors!

#### What Do You Need?

- compact disc (also known as a CD) (If you don't own any CDs, you can buy an old one at a garage sale. Or ask at a record store if they will give you a CD that won't play.)
- sunshine (or a bright flashlight and a room that you can make dark)
- piece of white paper

#### What Do I Do?

- 1. Take the CD out of its case and take a look at the blank side (the side that doesn't have any printing on it). You'll see bands of shimmering color. Tilt the CD back and forth and the colors will shift and change.
- 2. Hold the CD in the sunshine. Or if it's a cloudy day, turn out the lights and shine your flashlight at the CD. Hold your piece of white paper so that the light reflecting off the CD shines onto the paper. The reflected light will make fabulous rainbow colors on your paper.

(Don't reflect the sunlight into your eyes or anyone else's eyes. The reflected sunlight is so bright that it can injure your eyes.)

- 3. Tip the CD and see how that changes the reflections. Change the distance from the CD to the paper. What happens to the colors?
- 4. Take a close look at your CD. It's made of aluminum coated with plastic. The colors that you see on the CD are created by white light reflecting from ridges in the metal.

### **More Things To Do**

When light reflects off or passes through something with many small ridges or scratches, you often get rainbow colors and interesting patterns. These are called interference patterns. Here are several other ways you can see interference patterns.

- Squint at a distant bright light at night. You'll see starburst patterns around the light. If you look closely, you can see colors in the patterns. These patterns form when light bends around your eyelashes and imperfections in the layers that make up the lens of your eye. Tilt your head to one side while watching the pattern and notice that the pattern moves with you.
- In a dark room, look at a bright light (maybe a candle flame) through a nylon stocking, a silk scarf, a feather, or a tea strainer. The pattern that you see depends on what you look through. Move the thing you're looking through and notice that the pattern moves with it.
- Buy a set of "rainbow glasses" in a toy store or a science shop. Through these glasses, all lights look like rainbows. The glasses are made with diffraction gratings, clear plastic that is etched with many lines.

### What's Going On?

#### Why does a CD reflect rainbow colors?

Like water drops in falling rain, the CD separates white light into all the colors that make see reflecting from a CD are interference colors, like the shifting colors you see on a soap bubble or an oil slick.

You can think of light as being made up of waves-like the waves in the ocean. When light waves reflect off the ridges on your CD, they overlap and interfere with each other. Sometimes the waves add together, making certain colors brighter, and sometimes they cancel each other, taking certain colors away.

Thanks to © The Exploratorium on www.exploratorium.edu for this experiment

# **Vocabulary List: Grade 2**

ELA	Math	Science	Social Studies
adjective	cardinal number	behavior pattern	area
composition	chance	characteristics	authority
conversation	decreasing pattern	circular motion/	barrier
dictionary	difference	straight line motion	chronological
discussion	distance	/ zigzag movement	climate
everyday language	foot (measurement)	dissolving	custom
fiction	fraction	distance	distance
folktale	geometric	diversity of life	duty
glossary	shapes/figures	earth resources	goods
group discussion	height	gas	government
guest speaker	increasing pattern	habitat	heritage
main character	length	individual	justice
main idea	model	differences	landmark
margin	numeric pattern	liquid	privilege
mental image	ordinal number	magnification	qualifications
message	outcome	magnifier	rural
nonfiction	pattern extension	observation	services
noun	quarter-hour	parent/offspring	settlement
predictable book	regroup	similarity	symbol
prewriting	second (time)	pebble	tradition
pronoun	set	prehistoric	urban
publish	standard	properties	vegetation
purpose	measurement	reasoning	volunteer
reread	symmetry	scientist	
spelling pattern	table	similarities &	
table of contents	time interval	differences	
textbooks	whole number	solid	
theater	width	sound	
verb (action word)		universe	
		vibration	
		weight	

Source: http://jc-schools.net/tutorials/vocab/

## **Fitness Activity Guide**

<u>Parents</u>: Help your child get **30 or more minutes** of daily physical activity by **choosing at least three** activities from the options below. Each one takes about 10 minutes. We have included lots of choices, so that there is something for everyone -- from activities that increase heart rate, improve flexibility, and build muscle strength!

If you have access to the Internet, you can help your child track her or his physical activity by going to <a href="http://www.bam.gov/sub\_physicalactivity/cal\_index.asp">http://www.bam.gov/sub\_physicalactivity/cal\_index.asp</a>, where your child can create a customized physical activity calendar.

#### **Grades K-2**

- Activity Calendar (in English and Spanish) online at
  - o <a href="http://www.aahperd.org/naspe/Toolbox/pdf\_files/May09/Calendar\_EC\_Eng.pdf">http://www.aahperd.org/naspe/Toolbox/pdf\_files/May09/Calendar\_EC\_Eng.pdf</a> (English)
  - o http://www.aahperd.org/naspe/Toolbox/pdf\_files/May09/Calendar\_EC\_Span.pdf (Spanish)
- Small Space Energizers online at
  - o <a href="http://www.ncpe4me.com/pdf\_files/K-5-Energizers.pdf">http://www.ncpe4me.com/pdf\_files/K-5-Energizers.pdf</a>
- Get up and Move Game from "Lazy Town" online only
  - o <a href="http://www.noggin.com/games/lazytown/lazy\_getup/">http://www.noggin.com/games/lazytown/lazy\_getup/</a>



# May 2009 Early Childhood Physical Activity Calendar



SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
31 Go back and repeat the activities that you really enjoyed this month!		Duplicated with permission from the National Association for Sport and Physical Education (NASPE). To assess whether your child is receiving a quality physical education program, visit <a href="https://www.naspeinfo.org/observePE">www.naspeinfo.org/observePE</a> for an observation assessment tool.			1 Take a walk – each time you see a sign of spring, do 10 jumps for joy.	2 Motions of the Weather – Use your bodies to pretend to be different types of weather. Rain, wind, thunder, snowget creative.
3 Practice your throwing skills – find a big target and throw as hard as you can at it. Work on stepping right at the target with your "opposite" foot.	4 Rainbow Run – talk about the colors of the rainbow - as you name colors, run & touch 3 things that are that color.	5 Log rolls – find a safe space in your house and practice rolling in a straight, strong line. Use those muscles.	6 Copy Me – take turns doing three movements, such as reach high, touch your nose, shake your foot – after one person does the movements the partner has to copy them.	7 All Aboard –spread a big towel out on the floor. Stand on it, move on it, then fold it up. Can you still stand and move on it? Fold it again – move again.	8 Do the Opposite – work on doing opposite movements such as run fast and slow, reach high and low, march soft and hard.	9 Act out the movements of the animals you see in the spring.
10 Roll up some socks and practice your self toss and catch skill. Can you clap before you catch it? How about touch your tummy before you catch?	11 Read your favorite Nursery Rhyme and put actions to it so you can say it with your body.	12 Say the ABC's by putting your body into the shape of each letter.	13 Pretend that your elbow or your foot is a great big crayon and move all around your house coloring the most beautiful picture.	14 Find a ball and a big target to practice your kicking skills. Kick as hard as you can.	15 Take 5 minutes – go to every room in your house and do a funny dance that makes your mom or dad laugh. Make them do the dance with you.	16 Get outside and run – try running in a straight line, a curvy line, and then a zig zag line.
17 Get outside again and play catch. Follow the ball with your eyes and move to where the ball is going.	18 Using paper plates ask someone to help you make a hopscotch pattern and then work on your hopping and jumping.	19 Can you leap? Pretend that your house is full of puddles and your job is to leap over all of them. Don't get wet©	20 Find an extra chore that will help you become a better mover. (sorting clothes to work on throwing skills; sweeping the floor to work on strength)	21 Turn on some music and make your mom or dad dance with you. Tell them they have to dance for at least two whole songs.	22 Statues Game – Put your body into a balanced position and hold it while you count to 10. Try a more challenging position.	23 Practice your jumping jacks – can you do them standing up? How about lying on the floor?
24 Go for a walk – breath in the air as you swing your arms and hold your head high.	25 Can you skip? Give it a try – step, hop, step, hop.	26 Practice your ball rolling skills by rolling a ball back and forth with someone. Each time you roll it back up a step	27 Cut out a bunch of different shapes, put the shapes in a pile and then try putting your body into these odd shapes	28 Find different kinds of shoes in your house. Pretend to move as if you were wearing each kind of shoe. Stomp in your boots, prance in your slippers, slide in your skates.	29 Get outside and practice your running. When you run work on pumping your arms front and back, and moving in a straight line	30 Get silly today and make up a new sound or word and then make up a new action to go along with that word or sound.

### **Arts Activities for Grades PreK-2**

A number of the activities listed reference specific works of art. If you are not familiar with them you may find them on the internet (even the performances). However, these are provided as examples, and you can substitute similar works of art with which you are familiar or to which you have access.

All Arts Activities taken from the *Blueprints for Teaching and Learning in the Arts: Grades PreK-12*.

#### DANCE

- Practice structured warm-ups learned at school.
- Explore and repeat movement.
- Improvise with props (e.g., balls, hoops, scarves).
- Explore images that suggest a beginning, middle and end; compose a short dance phrase—a movement sentence—with a beginning, middle and end.

#### **MUSIC**

- Visit public library and select a variety of recorded music selections for children.
- Perform music with repetitive or contrasting patterns.
- Perform music with a variety of dynamic levels.
- Sing songs in English and other languages with attention to feeling and musical interpretation.
- Play instruments with attention to feeling and musical interpretation.
- Narrate a story and create musical accompaniment using rhythm instruments. Perform the story and assign each student a role, such as: narrator, actor, musician, conductor, set/costume designer, tech/lighting/sound, composer, audience member, poster designer, usher, ticket maker and seller, etc.
- Draw a picture representing a person in the arts professions. Create a book with pictures and text that describes a particular career path.
- Sing songs about people's jobs, such as "I've Been Working on the Railroad," "Whistle While You Work," or "Working Together" by Carmino Ravosa. Make up original verses to reflect jobs students can identify in their lives.
- List places in the community where music is performed. Identify the function and role of music in their daily lives (school, home, place of worship, shopping mall, etc.). Describe or compare ways music is used at home and at school for holidays, celebrations, and traditions.
- Create a list of expected behaviors before attending a concert in the school or community. Discuss and model expectations.
- Listen to a CD containing soothing environmental sounds (e.g., the ocean, a rainforest, birds, the wind). Simulate the sounds orally using breath, long-sustained vowels, or short percussive sounds made at the front of the mouth.

#### **THEATER**

- Pantomime simple daily activities, including healthful practices in eating and hygiene.
- Demonstrate the sound and movements of animals and/or people in a story.
- Dramatize storytelling through use of body, voice, and gesture.
- Listen to a story and create improvised dialogue to play a scene from the story.
- Use gesture and voice with a prop, mask, or puppet to express character.
- Create or re-create a story using tableaux (frozen body pictures) with beginning-middle-end and whowhat-where evidence.
- Create a five-panel storyboard or cartoon for an original story or improvisation, with notes describing the main action in each segment.

- Use a photograph as a prompt for asking and answering the "5 Ws" (who, what when, where, and why?) about the characters in an imagined story.
- Draw a scene or design a costume from a story read in class.
- Use a children's story such as *Goodnight Moon* or *Tar Beach* to generate drawings and a 3-D set model based on the illustrations in the book.
- Using a drawing of a character as a basis, create a stick puppet that demonstrates the characteristics of the puppet through costume.

#### **VISUAL ARTS**

- Create a painting that demonstrates:
  - o personal observations about a place
  - o control of paint media and various brushes
  - o basic organization of space
  - o experimentation with mixing colors
- Demonstrate the various ways that paints and brushes can be used:
  - o paint thick, thin
  - o strokes long, short, curved
  - o colors light, dark, dull, bright
  - o shapes big, small, layered
- Create a drawing that demonstrates:
  - o experimentation with various drawing tools such as, oil pastels, pencils, colored pencils, crayons
  - o use of varied lines and colors to convey expression
- Discuss how artists express themselves; note the use of different mediums, and the effects of black and white, and color.
- Create a collage that demonstrates experimentation with:
  - o placement of shapes
  - o color
  - o pre-cut and torn paper
  - o composition
  - o textured materials
  - o layering
- Discuss the role of color and placement of shapes in creating a sense of depth and balance.

# **Educational TV Shows**

Channel	Show	Subject	Day	Time	Recommended Grades	Description
Disney Playhouse	Handy Manny	ELA, Spanish	Weekdays	9:00 AM	Pre-K, K-1	In the town of Sheetrock Hills everyone gets help from handyman Manny Garcia and his seven talking tools like Turner the screwdriver and Dusty the saw. The series teaches basic Spanish words and phrases and exposes kids to Latin culture. Other lessons focus on working together and problem solving as a team.
PBS-13	Sid the Science Kid	Science	Weekdays	9:00 AM	Pre-K, K-1	Join Sid, his family and his friends as they make science fun!
Disney Playhouse	Imagination Movers	Science	Weekdays	9:30 AM	Pre-K, K-1	The popular New Orleans band introduces preschoolers to high-energy rock music while emphasizing creative problem-solving skills.
Nick Jr.	Go Diego, Go	ELA	Weekdays	9:30 AM	K-1, 2-3	Diego's mission is to help rescue an animal in trouble. Using observation skills and scientific tools like computers, a field journal, and cameras-and with help from young viewers at home-Diego succeeds in his goal while introducing kids to information about each animal's sound, movement, habitat, diet, family, and physical characteristics.
NYC TV - 25	Zula Patrol	Science	Weekdays	9:30 AM	Pre-K, K-1	Delivers astronomy-based science education and character-building lessons in an entertaining format.
PBS-13	Super WHY!	ELA	Weekdays	9:30 AM	Pre-K, K-1	Animated television series helps children learn key reading skills, including alphabet and rhyming

Channel	Show	Subject	Day	Time	Recommended Grades	Description
PBS-13	Clifford the Big Red Dog	General	Weekdays	10:00 AM	Pre-K, K-1	Animated series about Clifford, a big red dog; his loving "human," Emily Elizabeth; and dog pals, T-Bone and Cleo. The series emphasizes good citizenship and the importance of community.
PBS-13	WordGirl	ELA, Vocabulary	Weekdays	4:30 PM	K-1, 2-3	Each episode introduces up to four new vocabulary words in an engaging, humorous way. WordGirl is a superhero spoof so the storylines are funny and clever takes on familiar stories from that genre.
HBO OnDemand	Classical Baby Compilation	Music, Arts	OnDemand	29 minutes	Pre-K, K-1, 2-3	This Emmy-nominated animated special introduces children to works of music, painting, and dance.
Nick Jr.	Dora the Explorer	ELA, Spanish	Weekdays	8:30 AM	K-1, 2-3	Dora the Explorer teaches children how to observe situations and solve problems as they explore Dora's world with her. Along the way, kids learn basic Spanish words and phrases, as well as math skills, music, and physical coordination. The show is highly interactive, and Dora's young viewers are encouraged throughout the show to respond to Dora and to actively participate in the adventure through physical movement.