"Learning is Sweet: A Chocolate World of Reading & Math"

For further information contact...

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2013 - 2014 IDEA CATALOG OF EXCELLENCE

- PROGRAM OVERVIEW

“Learning is Sweet: A Chocolate World of Reading and Math” is a program that integrates reading and math while students become involved in reading the biography, Chocolate by Hershey: The Story Milton Hershey by Betty Burford. The students will have the opportunity to read this chapter book in small or large group settings. The students will undergo different reading comprehension skills such as discussing the genre of the story (non-fiction-biography), sequencing, character development, main idea. They will also integrate math activities related to their reading such as: using measuring skills by making chocolate brownies, graphing Hershey chocolates, making a timeline of Hershey Chocolates. The students will also have the opportunity to integrate technology by researching additional information about Milton Hershey and the Hershey Chocolate Factory/ Hershey Park (it's optional to use the classroom computer, Nook, or Kindle Fire). Follow up readings can include stories like, The Chocolate Touch by Patrick Catling. Students can make connections with themselves, the world and other literacy.

Students can be assessed both formally and informally. Students respond to verbal comprehension questions and written assessments. Students can create an Attribute Web about the character’s description. Students will also outline a story map about the story. In addition to assessing reading skills, the students will also be assessed by using their math skills such as creating a chocolate bar graph, completing a timeline Hershey chocolates, and using measuring while making chocolate brownies.

This program was created for a classroom of 18 third grade students. This program is designed for both small group and whole group instructions. This activity is designed for third to fifth grade students, but it can easily be adapted for younger students. The reading instructor can choose to do a read aloud and create simple math lessons according to the students’ grade level.

- OVERALL VALUE

The overall value of this program is that students can easily become engaged in reading and math activities. There couldn’t be a better way to draw students’ love for learning by opening the doors of a chocolate world into the classroom. The students will have ample opportunities to read and use important reading skills while making connections with themselves, the world, and other literacy.

The students will also integrate math using hands on chocolate activities such as: graphing, problem solving and measuring skills. This program opens the door into a chocolate world of learning, and for this reason, teaching and learning couldn’t be sweeter!

- LESSON PLAN TITLES

- Introducing A World of Chocolate
- Timeline and Hershey Bar Graph: Integrating Reading and Math
- Hershey Chocolate Brownies

- MATERIALS

Materials for each lesson are listed separately on each lesson plan. Overall materials budget list will follow all the lesson plans.

- ABOUT THE DEVELOPER

Maite Rodriguez-Paz obtained a Bachelor’s Degree in Psychology in New York City. She later obtained a Master’s Degree in Education from New York City College. In 2006, she received a National Board Certification here in Florida.

Maite is currently teaching third grade at Ridgeview Global Studies Academy, she’s been teaching there for 11 years. She has previously adapted two T2T adapter grants. This is her first time developing a T2T grant.
Lesson Plan No 1: Introducing a World of Chocolate

**SUBJECTS COVERED**
Reading

**GRADES**
Third

**OBJECTIVES**
Students will...

... read the story *Chocolate by Hershey: A Milton Hershey Story*.

... learn new vocabulary words, use several reading comprehension skills, and research information on the internet.

**COMMON CORE STANDARDS**
CCSS.ELA- Literacy.RI.3.2 Recount stories, including fables, folktales, and myths from diverse cultures; determine the central message, lesson, or moral and explain how it is conveyed through key details in the text.

CCSS.ELA-Literacy.RI.3.3 Describe characters in a story (e.g., their traits, motivations, or feelings) and explain how their actions contribute to the sequence of events.

CCSS.ELA-Literacy.RL.3.4 Determine the meaning of words and phrases as they are used in a text, distinguishing literal from nonliteral language.

CCSS.ELA-Literacy.RL.3.7 Explain how specific aspects of a text’s illustrations contribute to what is conveyed by the words in a story (e.g., create mood, emphasize aspects of a character or setting).

**MATERIALS**
- *Chocolate by Hershey: A Milton Hershey Story* chapter books
- Chocolate by Hershey Study Guide
- Character Attribute Web and Story Map
- Teacher Made Reading Assessment
- Computer or Smart Tablets (optional) for individual research in websites such as: www.hersheypark.com and www.hersheys.com

**DIRECTIONS**

**Day 1**
The students will make prediction charts about the story. They will write vocabulary words and definitions.

**Day 2-4**
The students will read two chapter books per day. They will use the study guide to answer questions. The students will work in small group settings to discuss stories.

**Day 5**
The students will take a vocabulary and reading test about the story. The students will have an opportunity to make real world connections by researching facts on the internet or apps on the tablets (optional) about the real Hershey Chocolate Factory.

**EVALUATION/ASSESSMENT**
- Reading Handout
- Check for reading fluency and comprehension skills
- Vocabulary and Reading Assessment

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“Learning is Sweet: A Chocolate World of Reading & Math” Maite Rodriguez-Paz
Lesson Plan No 2:
Timeline and Hershey Bar Graph - Integrating Reading and Math

■ SUBJECTS COVERED
Reading and Math

■ GRADES
Third

■ OBJECTIVES
Students will…

… use text for information to create a timeline using dates and names of each Hershey invented.

… use a bag of mini Hershey Bars to create a bar graph to determine the number of Hershey bars in each bag.

… make a graph of their favorite Hershey bar.

■ COMMON CORE STANDARDS
CCSS.ELA-Literacy.RI.3.1 Ask and answer questions to demonstrate understanding of a text, referring explicitly to the text as the basis for the answers.

CCSS.Math.Content.3.MD.A.1 Know relative sizes of measurement units within one system of units. Within a single system of measurement, express measurements in a larger unit in terms of a smaller unit. Record measurement equivalents in a two-column table.

CCSS.Math.Content.3.MD.A.2 Use the four operations to solve word problems involving distances, intervals of time, liquid volumes, masses of objects, and money, including problems involving simple fractions or decimals, and problems that require expressing measurements given in a larger unit in terms of a smaller unit. Represent measurement quantities using diagrams such as number line diagrams that feature a measurement scale.

■ MATERIALS
- Chocolate by Hershey: A Milton Hershey Story chapter books
- Pencils and crayons
- Pack of Mini Hershey Bars
- Timeline and Bar Graph worksheets

■ DIRECTIONS
Making the Timeline:
The students will use the timeline worksheet and write the name of the Hershey bar that was invented according to the year. They will use the chapter books for reference.

The Hershey Chocolate Bar-Graph:
The students will discuss why the bag is measured by ounces and not by number. The students will make predictions about the total amount of mini chocolate bars inside each bag. They will also predict the name of the chocolate bar with the most and least amount. After their predictions, they will color in the bar graph and confirm predictions.

Favorite Classroom Hershey Bar Graph:
The students will vote for their favorite chocolate bar. Each student will go up to the Smart Board (you can also make a large graph) and color in their favorite chocolate bar. The students will color their individual bar graphs and compare it with the previous Hershey bar graph. They will enjoy their favorite chocolate bar as a treat.

■ EVALUATION/ASSESSMENT
- Timeline worksheet
- Hershey Chocolate Bar Graph Worksheet
- Check for Math skills such as most, least amount, range, measuring skills.
Lesson Plan No 3: Hershey Chocolate Brownies

**Subjects Covered**
Reading and Math

**Grades**
Third

**Objectives**
Students will…
- read and understand informational text using a chocolate brownie recipe.
- use measuring skills as they prepare the brownies.

**Common Core Standards**
CCSS.Math.Content.3.MD.A.2 Use the four operations to solve word problems involving distances, intervals of time, liquid volumes, masses of objects, and money, including problems involving simple fractions or decimals, and problems that require expressing measurements given in a larger unit in terms of a smaller unit. Represent measurement quantities using diagrams such as number line diagrams that feature a measurement scale.

CCSS.ELA-Literacy.RI.3.7 Explain how specific aspects of a text’s illustrations contribute to what is conveyed by the words in a story.

**Materials**
- Measuring cups, spoon, spatula, bowl, aprons
- Box of Hershey’s Chocolate Brownie Mix
- Notepad Chart with written Recipe for Brownies

**Directions**
The students will be given instructions about making brownies. They will read materials needed and procedures from the large written recipe. The students will take turns and measure materials needed for making the brownies.

The students will discuss the measuring tools and their use for measuring. The students will make the batter and teacher can choose to bake it in school or take it home to bake. The students will enjoy the delicious treat they all made.

**Evaluation/Assessment**
The students will be informally evaluated on measuring skills and tools for measuring. Students will discuss specific measuring terms such as liquid, volume, mass, and cups.
# Materials Budget

<table>
<thead>
<tr>
<th>SUPPLIER</th>
<th>ITEM # AND DESCRIPTION</th>
<th>COST</th>
<th>QUANTITY</th>
<th>TOTAL COST</th>
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<tbody>
<tr>
<td>novelunits.com</td>
<td>Chocolate by Hershey Unit Set &amp; Study Guide</td>
<td>$143.30</td>
<td>1 set</td>
<td>$143.30</td>
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<td>Amazon.com</td>
<td>Chocolate by Hershey additional books</td>
<td>6.58</td>
<td>3</td>
<td>19.74</td>
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<td></td>
<td>24” x 32” Chart Tablet</td>
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<td>Walmart</td>
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<td>Betty Crocker Brownie Mix</td>
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<td>4.56</td>
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<td></td>
<td>Chocolate Brownie Ingredients (egss, oil, pan)</td>
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<td>Dollar Tree</td>
<td>Index Cards</td>
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Subtotal: $193.86

Tax if applicable: 17.90

Shipping if applicable: 17.90

Total Budget Amount: $211.76

Teacher: **Maite Rodriguez-Paz**

School: **Ridgeview Global Studies Academy**
### Rubric

**Student Name** 

<table>
<thead>
<tr>
<th>Level 1</th>
<th>Level 2</th>
<th>Level 3</th>
<th>Level 4</th>
<th>Student Score</th>
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</thead>
<tbody>
<tr>
<td>Students can read and understand vocabulary words.</td>
<td>Scored less than 50% on vocabulary test.</td>
<td>Scored higher than 50% and less than 80% on vocabulary test.</td>
<td>Scored 80% or greater on vocabulary test.</td>
<td>Scored 100% on vocabulary test.</td>
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<tr>
<td>Students are able to answer questions correctly.</td>
<td>Scored less than 50% on comprehension test.</td>
<td>Scored higher than 50% &amp; less than 80% on comprehension test.</td>
<td>Scored 80% or greater on comprehension test.</td>
<td>Scored 100% on comprehension test.</td>
</tr>
<tr>
<td>Students will create a graph using chocolate bars.</td>
<td>Minimal understanding of graphing skills.</td>
<td>Moderate understanding of graphing skills.</td>
<td>Good understanding of graphing skills.</td>
<td>Excellent understanding of graphing skills.</td>
</tr>
<tr>
<td>Students will create a timeline using dates of creations of chocolates.</td>
<td>Minimal understanding of creating a timeline.</td>
<td>Moderate understanding of creating a timeline.</td>
<td>Good understanding of creating a timeline.</td>
<td>Excellent understanding of creating a timeline.</td>
</tr>
<tr>
<td>Students will read baking instructions and use measuring skills.</td>
<td>Minimal understanding of reading instruction and measuring.</td>
<td>Moderate understanding of reading instruction and measuring.</td>
<td>Good understanding of reading instruction and measuring.</td>
<td>Excellent understanding of reading instruction and measuring.</td>
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</table>
READING TEST

HERSHEY BY CHOCOLATE: A Story about Milton S. Hershey

Name__________________________________________________________

Vocabulary

1. errands a. excitedly
2. sober b. trips taken to relay messages or to do tasks
3. nougat c. rich or expensive
4. confectionery d. serious
5. feverishly e. a building with circular ground plan
6. lavish f. a large tent used for fairs or shows
7. pavilion g. confection consisting of sugar or honey paste with nuts.
8. rotunda h. a set of sweet items for sale, candy making.

*Fill in the blank

9. Empty-handed, Milton _______________ off to talk to Brenneman at the bank.
COMPREHENSION

1. What type of genre is this chapter book?
   a) realistic fiction
   b) mystery
   c) biography
   d) autobiography

2. Please number the events in order of sequence according to the story (numbers 1 - 5):
   _____ Milton Hershey creates the Deed of Trust, establishing a school for orphan boys.
   _____ M. Hershey buries his matchbox full of pennies.
   _____ M. Hershey quits school and begins to work for a newspaper editor.
   _____ M. Hershey marries Kitty in New York City.
   _____ A bronze statue of Milton Hershey stands in the great rotunda of Founders Hall.

3. Which three Hershey products did Milton sell first:
   __________________________________________________________
   __________________________________________________________
   __________________________________________________________

4. Why did Milton Hershey have to split his company into three parts?
   a) He didn’t want to work anymore
   b) His company was growing too much and he couldn’t keep up with it.
   c) His family wanted to help him run each part
   d) He wanted to give each one of his son a part of the company.

5. What part of Milton’s life did you find the most interesting? Why?
   _____________________________________________________________________________________________________
   _____________________________________________________________________________________________________
   _____________________________________________________________________________________________________
**Hershey’s Fudge Brownie Recipe**

**Ingredients:**
- Brownie Mix with Hershey’s Fudge
- ¼ Cup Water
- ¼ Cup Vegetable Oil
- 1 Egg

**Instructions:**
- Heat oven to 350°F.
- Mix ingredients in a medium bowl until well blended. Place it in a pan.
- Bake in the oven for about 40 min.
- Enjoy brownies when they’re cool enough to eat!
# HERSHEY'S CHOCOLATE GRAPH

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<th></th>
<th>Milk Chocolate</th>
<th>Krackel</th>
<th>Special Dark</th>
<th>Mr. Goodbar</th>
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# MRS. RODRIGUEZ'S FAVORITE HERSHEY GRAPH

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<th>Milk Chocolate</th>
<th>Krackel</th>
<th>Special Dark</th>
<th>Mr. Goodbar</th>
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<tr>
<td>1900</td>
<td>1907</td>
<td>1925</td>
<td>1930</td>
<td>1937</td>
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HERSHEY’S CHOCOLATE TIMELINE