Blackhawk School District

FIDO Bag

Day #3 Grade 4

Included in this packet are the at home instructional materials that are to be completed as part of the flexible instruction day program of the Blackhawk School District. This work will be due to the teacher two days after the school cancellation.
You may email your child's teacher during the day if you have questions about these assignments.
Here are the directions for today's assignments:

Subject	Directions	Materials
Reading	1. Put your name and date on the top of the worksheet packet titled: "Chew on these Bubble Gum Facts!" 2. Read the passage: Complete each of the sections that follow the passage.	- "Chew on these Bubble Gum Facts!". - Pencil
Writing	1. Put your name and date on the top of the worksheet titled: "Chew on These Bubble Gum Facts!". 2. Read the prompt and answer all parts. This is a descriptive writing passage. Please write in complete sentences, use capital letters, use correct punctuation.	- "Chew on these Bubble Gum Facts!" writing worksheet. - Pencil
Spelling	1. Put your name and date on the top of the worksheet titled: "Spelling Tic-Tac-Toe". Choose 3 spelling tasks in a row (like a game of tic-tac-toe). 2. Use your weekly spelling list. Follow the directions for each of the 3 tasks you choose. Lined paper is included for the spelling tasks.	-"Spelling tic-tac-toe" Worksheet -Lined paper Crayons/colored pencils/markers -Pencil
Math	1. Put your name and date on the top of the worksheet titled: "Find the Mistakes". Explain the mistake that was made in each problem and then solve the math problem correctly. 2. Put your name and date on the top of the worksheet titled "Even and Odd Subtraction" Follow the 3 strep directions.	-"Find the Mistakes" -"Even and Odd Subtraction"
Additional (Science)	1. Put your name and date on the top of the worksheets titled: "Renewable vs. Non-Renewable Resources". 2. Read the article. Answer the questions that follow. Use the article to help you answer the questions.	-"Renewable vs. Non-Renewable Resources" worksheets -Pencil
Music	1. Complete music worksheet	- worksheet

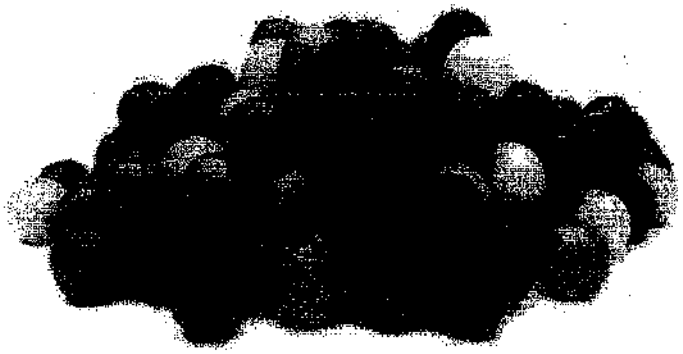
PA Common Core Standards: CC.1.3.4.F; CC.1.3.4.1; CC.1.3.4.K

Name: _____

Chew on These Bubble Gum Facts!

By Lydia Lukidis

Here is a riddle for you. What tastes good, is fun to chew, but can't be swallowed? You guessed it, bubble gum! People love to chew gum. In fact, people around the world have been chewing gum for thousands of years. But have you ever wondered how gum is made?



You may not believe this, but gum comes from trees. Ancient Greeks chewed something called resin. They got it from the bark of mastic trees. Ancient Mayans, who lived in South America, used something different. They chewed chicle. Chicle is very rubbery. It is made from the sap of the sapodilla tree. The indigenous people of North America chewed the sap from spruce trees.

In 1871, the chemist Thomas Adams created chewing gum made out of chicle. He manufactured it. That means he used machines to make a lot of gum. Then he sold it to many people. The good thing about chicle was that it did not melt when you chewed it. Instead, it got softer the more it was chewed.

Chicle was used to make gum for many years. Then in 1928, Walter Diemer invented modern bubble gum. The first bubble gum was pink. Diemer called it "Dubble Bubble." Today, pink is still the most popular color for bubble gum. But chicle is no longer needed to make gum. Chemists figured out ways to create artificial gum. Everything could be made in a lab. Chemists discovered other things too. For example, they figured out how to make the gum's taste last longer. That made people happy!

But people who chew gum need to remember something. Gum is not meant to be

swallowed. When we eat food, it is digested in our bodies. That keeps us healthy. However, our bodies cannot digest gum. Some people believe the gum sticks together in our stomach and blocks everything. Others even believe that gum stays there for seven years. This is not true. If you swallow gum, it will just come out when you go to the bathroom.

There are many ingredients in today's bubble gum. There is sugar, corn syrup, softeners, flavoring, and latex. The latex makes the gum stretch. That way, you can blow bubbles.

Speaking of bubbles, do you know who blew the biggest bubble in the world? According to the Guinness Book of World Records, Chad Fell from the United States did. In 2004, he blew a bubble 20 inches wide and he didn't even use his hands! That's pretty impressive. You can also practice blowing big bubbles. But be prepared to get some gum sticking to your face once the bubble pops!

About the Author

Lydia Lukidis is a published children's author with a multi-disciplinary background that spans the fields of literature, theater, and puppetry.

Lydia's picture book, *Gerbs in the House: The Dilly Dally Bedtime Routine*, is now available. Find out if Mocha will ever get his silly son to sleep!

Lukidis, Lydia. *Gerbs in the House: The Dilly Dally Bedtime Routine* ISBN: 978-0-9917402-7-7

Name: _____

Chew on These Bubble Gum Facts!

By Lydia Lukidis

1. According to the information you read in the article, which statement is true about bubble gum?

   a. Gum was first invented by Thomas Adams in 1871.
   b. Walter Diemer called his modern day bubble gum, "Hubba Bubba."
   c. People in ancient times, such as the Greeks and the Mayans, chewed different types of tree sap as a form of gum.
   d. Modern day bubble gum only has one or two ingredients in it.

2. Is chicle still used to make bubble gum? Why or why not?

   _____

   _____

   _____

3. Based on the information in the article, what did Chad Fell do?

   a. He made bubble gum out of resin.
   b. He manufactured chewing gum made out of chicle.
   c. He invented modern bubble gum in a lab.
   d. He blew a 20 inch bubble in 2004.

4. A myth is a popular belief that isn't true. What are two myths about bubble gum that some people believe?

   1. _____

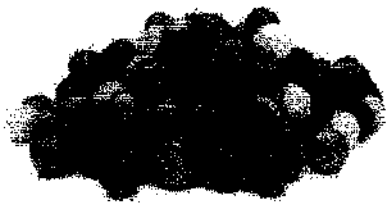
   2. _____

5. What ingredient in modern day bubble gum makes it stretch? _____

Name: _____

Chew on These Bubble Gum Facts!

By Lydia Lukidis



Match each vocabulary word from the reading passage with the correct definition.

_____ **1.** impressive	**a.** a copy or replica of something that occurs naturally
_____ **2.** resin	**b.** food items that you combine to make a specific dish
_____ **3.** indigenous	**c.** awesome; worthy of admiration
_____ **4.** chemist	**d.** a question or statement that is posed in such a way that requires it to be solved
_____ **5.** artificial	**e.** cause food or drink to pass down the throat
_____ **6.** manufactured	**f.** native; originating from a particular place
_____ **7.** ingredients	**g.** the body's way of breaking down food so it can be used to supply nutrients and energy
_____ **8.** riddle	**h.** a sticky substance that comes from trees and plants
_____ **9.** digest	**i.** chemical researcher; expert in chemistry
_____ **10.** swallow	**j.** make a large quantity of something using machinery

PA Common Core Standards: CC.1.4.4.L; CC.1.4.4.M; CC.1.4.4.O

Name: _____

Chew on These Bubble Gum Facts!

By Lydia Lukidis

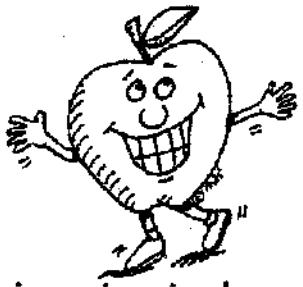
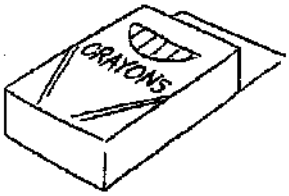
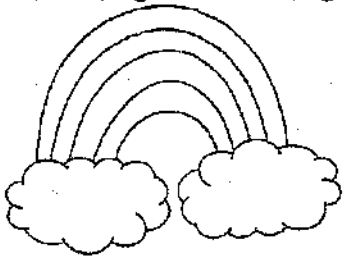
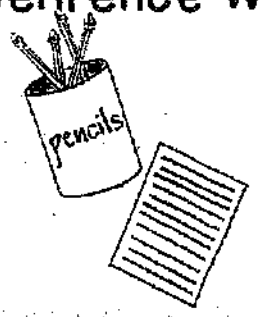
In the article, "Chew on These Bubble Gum Facts!" you learned that people have been chewing gum for thousands of years. However, it wasn't until 1928 that modern bubble gum was invented by Walter Diemer.

On the lines below, describe how you would change modern day bubble gum to make it even better. Would you blow bubbles that make you turn invisible? Would your bubble gum change shape when you blow bubbles? Describe your perfect bubble gum in detail on the lines below.

PA Common Core Standards: CC.1.4.4.F

Spelling tic-tac-toe 2

Practice your spelling words using these fun activities! Ask a parent to sign your notebook after you finish one.

ABC Order apple avocado banana grapes Write your words in a alphabetical order.	**Jumping Jacks**  Do a jumping jacks as you spell each letter of your words.	**Crayons Creations**  Use crayons to write each of your words.
Air Writing  Write your words in the air with your finger.	**Picture Perfect**  house Draw a picture to match each word. Be creative!	**Rainbow Write**  Write your words using a different colour for each letter!
To the Cloud!  Write each of your words in a cloud shape.	**Perfect Practice** 1. friend 2. helping 3. school Write your words in your very best hand writing.	**Sentence Work**  Write sentences for five of your words.

Common Core Standards: 4.NBT.B.5

Name: _____ Skill: Multiplying 4-Digit by 1-Digit Numbers

Find the Mistakes

a. There is a mistake in the way this math problem was solved.

$$\begin{array}{r} {}^{2}\,{}^{4}\,{}^{7} \\ 1{,}248 \\ \times \quad 9 \\ \hline 9{,}232 \end{array}$$

Solve the math problem correctly.

Explain the error. _____

_____

_____

b. There is a mistake in the way this math problem was solved.

$$\begin{array}{r} {}^{6}\,{}^{4}\,{}^{3} \\ 8{,}276 \\ \times \quad 6 \\ \hline 54{,}156 \end{array}$$

Solve the math problem correctly.

Explain the error. _____

_____

_____

Name: _____

Even and Odd Subtraction

Step 1: Solve each subtraction problem.

Step 2: Cut out the cards.

Step 3: Sort them into "Even Answers" and "Odd Answers" on the other page.

8,737 − 217	1,563 − 941	9,117 − 3,808	9,361 − 7,402
4,918 − 2,173	1,234 − 910	7,479 − 885	5,374 − 2,092
2,178 − 1,059	6,390 − 2,743	3,883 − 3,790	5,412 − 3,612

Name: _____

Even and Odd Subtraction

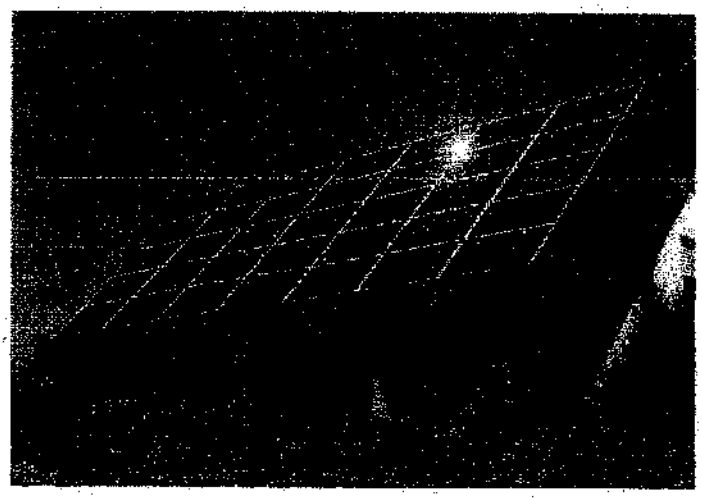
Even Answers	Odd Answers

PA Common Core Standards: CC.3.4.4.A1; CC.1.2.4.K; CC.1.2.4.L

Name: _____

Renewable vs. Non-Renewable Resources

By Lydia Lukidis



Energy resources are all around us. They are things that people use. They come from nature. We need them to survive. For example, they keep us warm and help us cook food. We also use them to do things that make life easier, like driving cars. These resources fall into two categories: non-renewable and renewable.

Confused? Let's take a closer look.

Non-renewable energy resources are limited. There is only a certain amount of them. They take a long time to be replenished. For example, coal, oil, and natural gas are non-renewable. Once we use or burn through them, they're gone forever. It takes millions of years to make more.

Renewable resources are different. They are replenished by nature fairly quickly. They rely on Earth's natural processes. Examples include plants, solar power, wind, and water. You can imagine that it's impossible to "use up" all the sunlight from the sun. And those rays are useful when heating up a building or a swimming pool. The same goes for water. It never fully disappears. The water cycle keeps the flow going. It may evaporate. But it still exists in gas form. Soon, condensation forms in the clouds. We're all familiar with the part that happens after that: it rains! Then the water cycle begins again.

For hundreds of years, humans have used renewable resources. They used wood for cooking and heating. They used wind and water for milling grain. Then about 150 years ago, scientists discovered the power of fossil fuel. Energy could be taken out of the fossils of ancient plants and animals. Soon, coal, oil, and natural gas replaced things like wood and

wind. They were great resources, but were not unlimited.

Today, we rely on many non-renewable resources. We use them to heat our homes, play our electronic devices, and power our cars. Think about that the next time you ride a school bus. The bus uses diesel or gasoline. Both are made from petroleum. Petroleum is a fossil fuel. Or imagine the next time you play a video game, or turn on a light. So many things require energy.

Unfortunately, there are problems with using so much non-renewable energy. First, these resources are limited. They will eventually disappear. How will we ride our cars and turn on our ovens then? Also, they're not good for the environment. Burning fossil fuels pollutes the air.

That's why it's important for us to develop new technologies. We have to find new ways of using renewable resources. For example, wouldn't it be great to have a car that runs on water or plant power? Or a house powered by solar energy instead of electricity? These resources would not pollute the environment. And they can be replenished in a short time. We need to keep doing research on these kinds of advancements.

In the meantime, it's important to use our non-renewable resources wisely. If we use them too much or too quickly, they will run out faster. One thing we can all do is follow the rule of the three R's: Reduce, Reuse and Recycle. Doing this will make a difference. We're all living on this beautiful planet together, so why not take care of it?

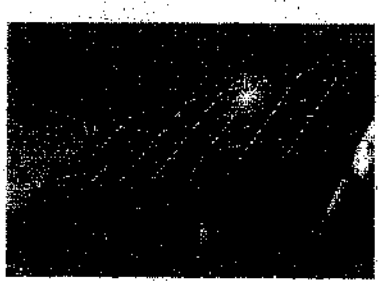
About the Author

Lydia Lukidis is a children's author with a multi-disciplinary background that spans the fields of literature, science, and theater. So far, she has over 40 books and eBooks published, as well as a dozen educational books. Her latest STEM books include A Real Live Pet! and The Space Rock Mystery.

Name: _____

Renewable vs. Non-Renewable Resources

By Lydia Lukidis



1. How long does it take for non-renewable resources to be replenished once they are used?

   a. a few years
   b. hundreds of years
   c. thousands of years
   d. millions of years

2. What form of energy transformed the way humans survive?

   a. solar power
   b. fossil fuel
   c. wind energy
   d. water energy

3. What is an advantage of using renewable resources, instead of non-renewable resources?

   _____

   _____

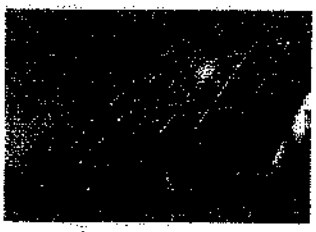
4. Complete the T-chart below with **three non-renewable resources** and three **renewable resources**.

Non-Renewable Resources	Renewable Resources

Name: _____

Renewable vs. Non-Renewable Resources

By Lydia Lukidis



Match each vocabulary word from the article with the correct definition.

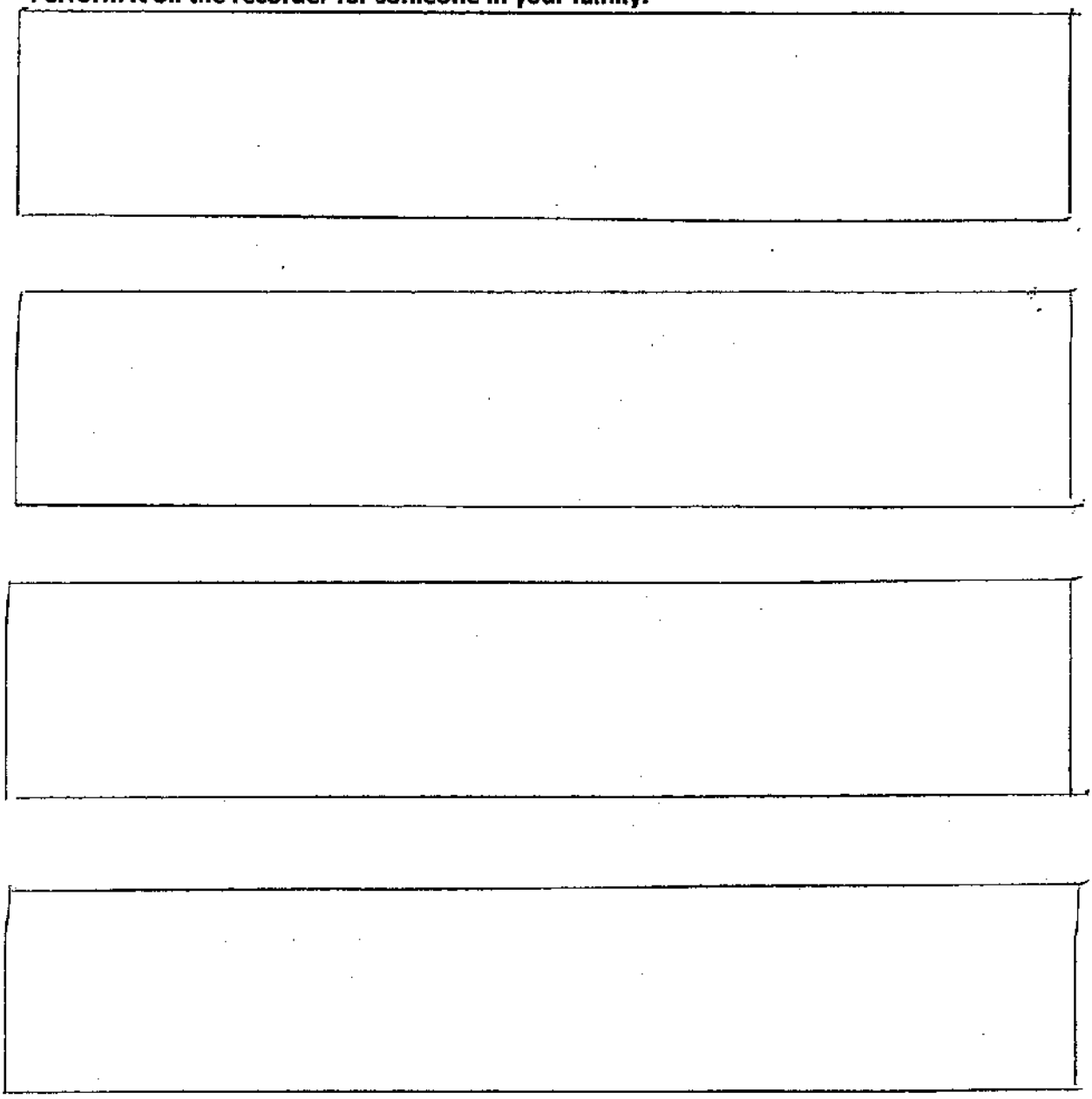
_____ **1.** replenished	**a.** a form of energy fueled by charged particles
_____ **2.** evaporate	**b.** a natural fuel that comes from ancient plants and animals
_____ **3.** condensation	**c.** a form of energy that comes from the sun
_____ **4.** fossil fuel	**d.** belonging to the distant past
_____ **5.** pollutes	**e.** filled back up again; replaced
_____ **6.** gasoline	**f.** contaminates the environment
_____ **7.** electricity	**g.** crushing or grinding grain
_____ **8.** solar power	**h.** to turn from liquid to gas
_____ **9.** milling	**i.** a form of petroleum used as fuel
_____ **10.** ancient	**j.** conversion of gas to liquid

Music Lesson for Fourth Grade

Compose four measures of rhythm using whole, half, quarter, eighth notes and quarter rests.

Clap it out. Assign each measure a note you play on the Soprano Recorder.

Perform it on the recorder for someone in your family.



Name these notes on the Treble clef