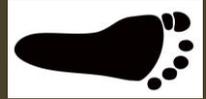


# January Feats in 4K



Happy New Year  
From 4K!



## Science in 4K

Using an inquiry approach to science, students will be studying about how light and heat are created, produced and used. Our scientists will explore how light travels in a straight line by experimenting with flashlights in a darkened room, observe how light from a light bulb creates a straight line through a small hole, create their own thermometers, and experiment with our own solar panels to see how heat can be created. Students will study how shadows are created, the bending and reflecting of light; as well as how it is absorbed. Additionally, they will explore how our society is harnessing light and heat into solar panels and using it to help support environmental initiatives.



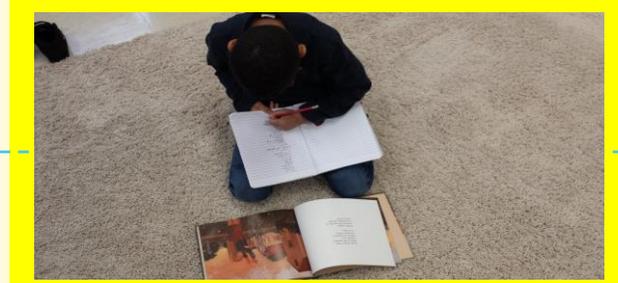
## Non-Fiction Reading

The fourth graders have embarked on a new reading journey, the exploration of nonfiction. They love this new unit because they feel that it makes them feel like “experts” and “smarter”, now that they are reading and writing about real world facts. There are several goals that I will cover with the students in this unit:

- Nonfiction readers and writers rev up their minds before reading: learning to preview the structures of non-fiction text.
- Nonfiction readers and writers determine importance and find main ideas and supportive details.
- Nonfiction readers and writers synthesize information and teach others.
- Nonfiction readers and writers respond to, and ask questions of, what they learn.

# Writer's Workshop-Literary Essay

Our writers have been working hard on becoming proficient in writing a literary essay. Students have been learning how to analyze literary essays for reasoning and evidence. Additionally, they are reading texts closely and responding to them in writing. Writers are learning strategies for revising their literary essays as well as learning strategies for editing their literary essays. Our writers have already published an essay and are busy working on other pieces as well. They have been excited to share their literary essays by typing them onto Google Classroom.



## MATH

### Partial Products Multiplication Strategy

$$\begin{array}{r} (40 + 8) \\ \times (70 + 5) \\ \hline \end{array}$$

$$\begin{array}{l} 40 \times 70 = 2800 \\ 40 \times 5 = 200 \\ 8 \times 70 = 560 \\ 8 \times 5 = 40 \end{array}$$

Step 3 - Compute the Partial Products

The combinations that we just created are called "partial products" because together they form part of the bigger product we are computing.

These combinations are simple to compute. Mentally solve each one.

Be sure to line the products up for addition in the next step!

### King Henry Died Unexpectedly Drinking Chocolate Milk



Kilo	Hecto	Deka	Unit	Deci	Centi	Milli
1,000	100	10	Meter Liter Gram	.1	.01	.001

largest to smallest - multiply      smallest to largest - divide

### Multiplying Using Partial Products

$$\begin{array}{r} 23 \times 32 \\ 20 + 3 \\ \hline \begin{array}{|c|c|} \hline 600 & 90 \\ \hline 40 & 6 \\ \hline \end{array} \end{array}$$

In 4 unit, students have been introduced to the basic principles of multi-digit multiplication by focusing on extending multiplication skills and exploring the partial-products method. They will use their knowledge of multiplication to find the areas of rectangles and to convert units of measurement.

