

NEWS FROM ACT

Jenison ACT Newsletter | March 10, 2023

General Class Update

It's been a few weeks since I was able to send out a newsletter. February flew by with our Winter Break, some snow days, staff PD, and I was under the weather with bronchitis for a few weeks. I'm happy be feeling well again and to share updates from our latest class sessions here (with quite a few pictures!). I hope this gives you a little window into what your child is learning when he/she comes to ACT. I continue to be so impressed with the students, their critical thinking, and their enthusiasm for what we are learning in class.

Third, fourth, and fifth grade students have finished up their second units and started their final ACT units of the school year. Sixth grade students are close behind and will start their final unit next week.

I am getting the ball rolling for testing for potential admittance to ACT for the 2023-2024 school year. As a reminder, current ACT students do not need to retest each year. However, we do expect students to continue to show growth and excellence in the general classroom. Thank you for supporting your child and helping to reinforce the expectations for ACT participation. As always, if you have any questions about your child's ACT participation, please don't hesitate to reach out.

Have a wonderful weekend!

Julie



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GRADE-LEVEL UPDATES

3rd Grade

Our *Food Science* unit was a hit and saw the students working as wonderful young scientists as we explored human anatomy (how our senses like taste/smell/texture impact our food choices and how nutrients are absorbed in the body) as well as learning more about the components that make up our food. The third graders had great fun testing various food items for the presence of macronutrients by using various chemical reagents, and I heard from many students just how much they loved experimenting with and exploring concepts in chemistry.

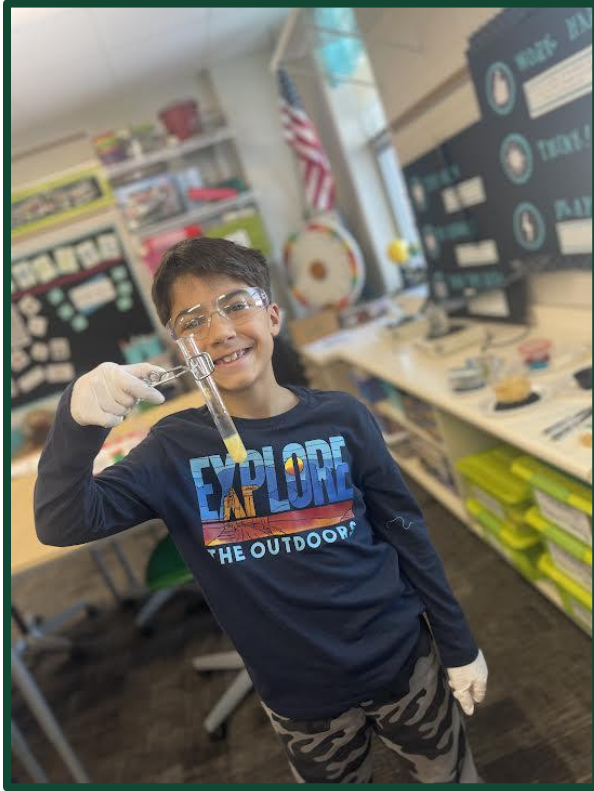
At the end of this unit, we circled back to one of the questions that I posed the students at the beginning of our studies: *Do you think about how nutritious a food is when you eat it?* I was so pleased to hear that some of the students DID now start to consider their food choices, nutrition labels, and MyPlate recommendations as they choose snacks to eat. These are meaningful and lifelong habits that are important to start thinking about even at a young age!

Our Grand Rapids Public Museum field trip has now been rescheduled (due to the snow day) to **Monday, March 20**. Thank you to those parents who have signed up to help chaperone this trip. I know the students are excited to learn more about the building blocks of our food by isolating DNA in strawberries! Please stay tuned for more field trip reminders as our trip date approaches.

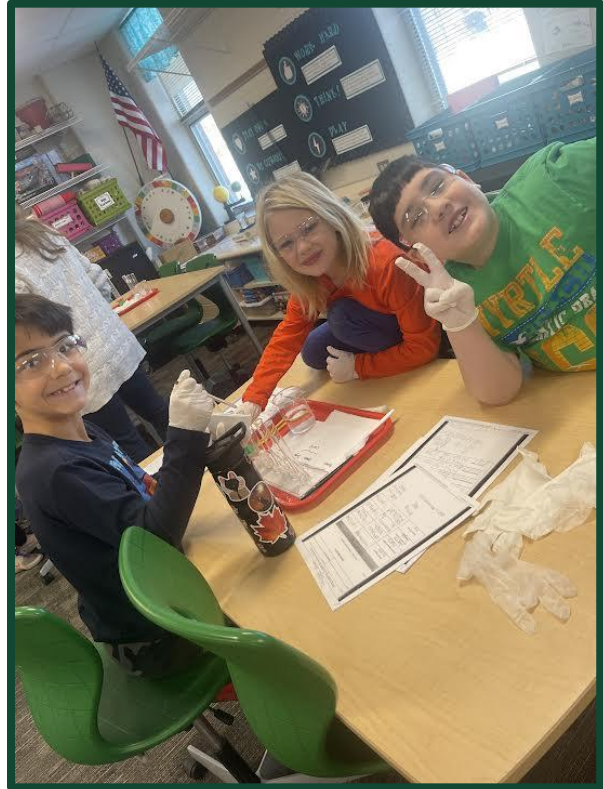
Now, we have launched our final unit – *Exploring Probability: Building a Funfair*. The concepts of probability have many real-world applications, and it is a great opportunity to teach students advanced math concepts. So far, we have explored the definition of probability and the formula used to determine the probability of certain outcomes. Students have been rolling dice and playing fun games in class as we prepare to building our own carnival games based on *chance*. Our carnival dates are scheduled for **Monday, April 24** and **Wednesday, April 26**, and they will be held during your child's regular ACT class time. Please mark your calendars now if you would like to participate and test your luck at playing our games! We look forward to having an authentic audience to whom we can display our learning at this culminating event of our third grade year! More information to follow!

GRADE-LEVEL UPDATES

3rd Grade Continued



A successful test for glucose using Benedict's Solution!



Thank you to all of our parent volunteers who helped to make our food nutrient testing labs a success!

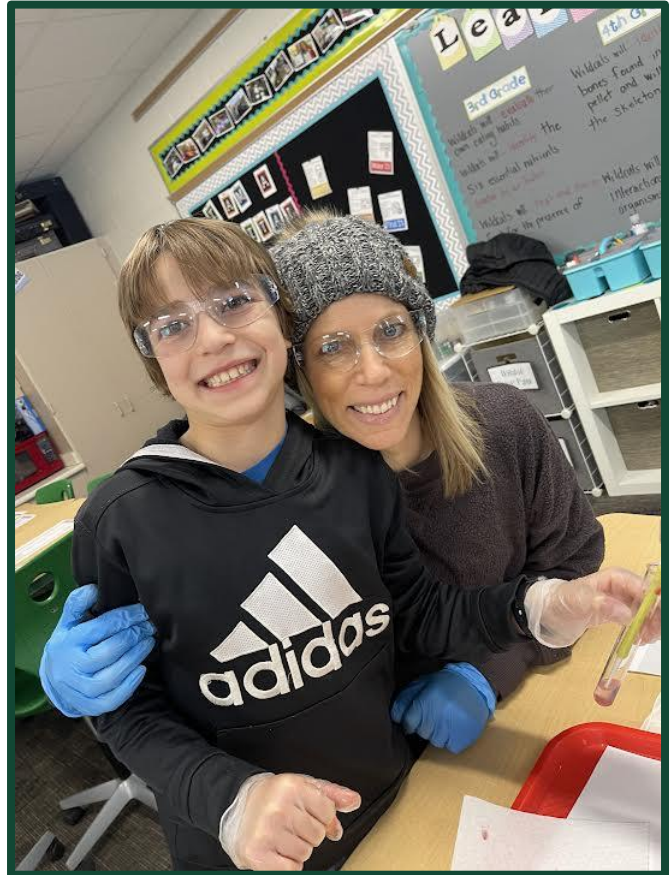


GRADE-LEVEL UPDATES

3rd Grade Continued



All smiles using the graduated cylinders.



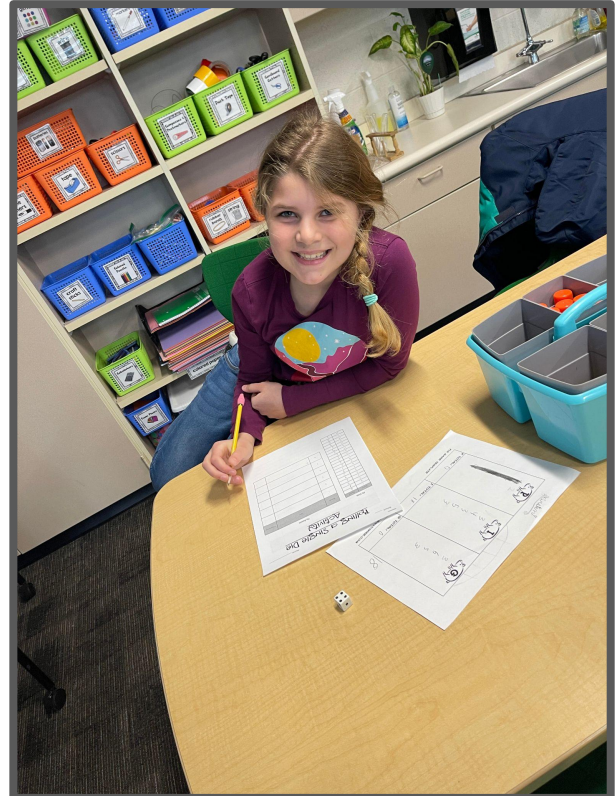
I see some future scientists in the making!

GRADE-LEVEL UPDATES

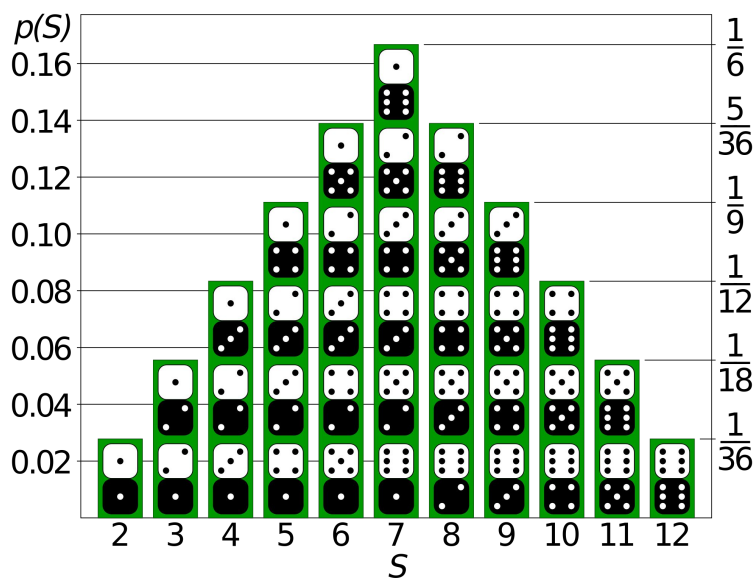
3rd Grade Continued



An M&M dice-rolling experiment.



We have begun to explore probability by playing in-class games like PIG and by completing some experiments with dice and chips.



GRADE-LEVEL UPDATES

4th Grade

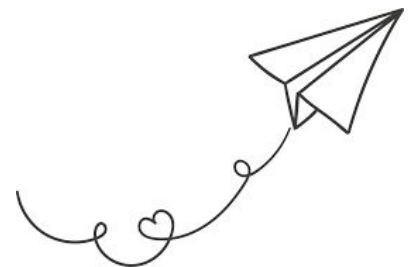
We finished our *Winter Ecology/Owl Pellet* mini unit in February after some fun in-class and field experiences! The students thoroughly enjoyed learning about birds of prey, dissecting owl pellets, learning about what causes winter, and exploring the adaptations that plants and animals make in the winter months. Our field trip to the Outdoor Discovery Center was a little chilly, but the students learned a ton and had a great time seeing owls, hawks, and eagles up close and in-person. We also had an AMAZING family turnout with many parents, grandparents, and other special guests joining us for our outdoor adventure!

Over the last few weeks, we have started our final unit entitled *Up, Up and Away: An Introduction to the History and Science of Flight*. To kick off this unit, students learned about some of the major aviation events that have happened throughout history and each student researched one aviation pioneer to complete a mini-biography. We discussed the major accomplishments of these individuals as well as what we could learn from them. I was impressed with the ideas the students presented as we introduced these people to our classmates: students identified themes of courage, hard work, grit, bravery, and the rights/abilities of women or other minority groups to name a few.

Next, we started our scientific explorations by focusing on two key questions: *What is air?* and *How does air move?* We learned about air pressure through some fun hands-on demonstrations (ask your child about the “can crusher” demonstration or some of the fun experiments we tried with balloons!) and then students started to learn about key principles that pertain to aviation and flight. Students worked their way through stations in which they explored gravity, flight forces, and air pressure, and we will also focus on some of the misconceptions that abound about how flying objects work – learning the differences between Bernoulli’s Principle, the Coanda Effect, and Newton’s Third Law of Motion.

Some classes have started a paper airplane lab where we have reviewed the steps of the Scientific Method and where the teacher actually WANTS paper airplanes to be thrown in class! FUN!

Our Air Zoo field trip has been rescheduled to **Friday, April 28** and more information will follow for chaperone sign ups in the near future. I hope you’ve enjoyed some fruitful conversations with your child as we get this fun unit kicked off!



GRADE-LEVEL UPDATES

4th Grade Continued



All smiles from the Outdoor Discovery Center!



GRADE-LEVEL UPDATES

4th Grade Continued



We were fortunate that the sun shone for some of our trip to the ODC! To the right: students checking out the water and petting one of the snakes!



GRADE-LEVEL UPDATES

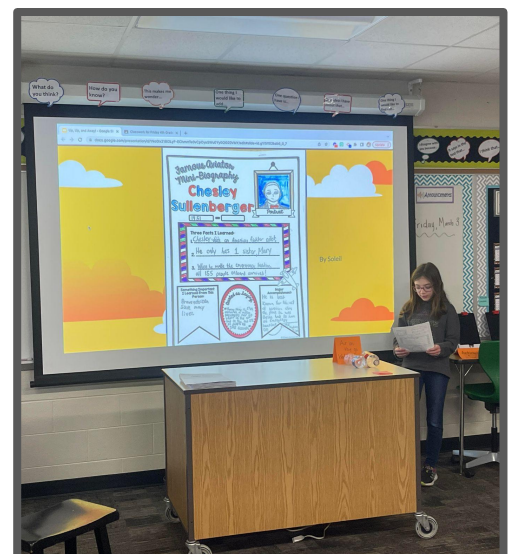
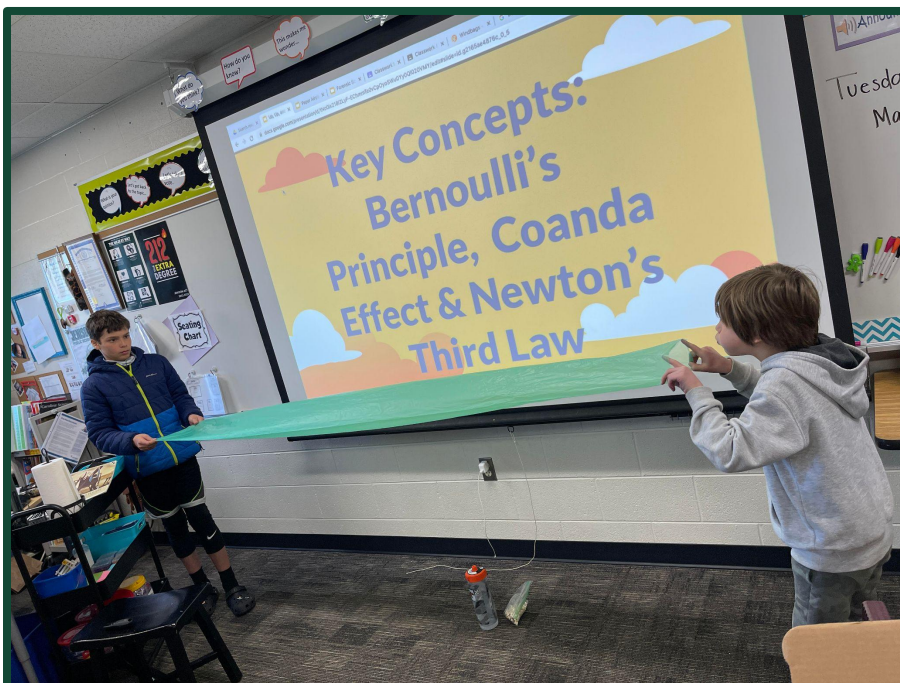
4th Grade Continued



To kick off our *Up, Up, and Away* unit, students completed mini-biographies to present in class of an aviation pioneer. We also have been completing hands-on activities to investigate air and air pressure.



Mia filled up this whole bag using only ONE breath! Thanks, Bernoulli!



GRADE-LEVEL UPDATES

5th Grade

Fifth grade ACT were AMAZING as they finished out their *Mystery Disease: Diagnosis of Symptoms & Experiences* unit. After spending time working through our "medical school" rotations, the students then launched into a simulation in which they were given a patient to diagnose and treat. Each doctor team had a video to watch of a virtual patient visit and they were able to check their patient's symptoms in a physical exam. Next, teams worked together to develop a *differential diagnosis* of potential conditions that their patient may have had.

Using a budget, teams then were required to confirm or negate these diagnoses by ordering medical tests. All the while, they communicated with their patient via email (and learned the appropriate way to compose and address a professional email!) as they waited for their test results. Upon reading and interpreting these results, the doctor teams then had to come up with a final diagnosis and treatment plan for their patient.

As part of our [ACT Medical Conference](#), the fifth graders then worked to create a professional presentation that they could share with their classmates showcasing their particular medical case. We had amazing class discussions and in the end, each team was able to learn whether or not their diagnosis was correct.

A very special thanks goes out to Dr. Garth Rotman (current ACT 5th grader Aubrey's dad), Dr. Sandip Kothari (former ACT parent), and current University of Michigan pre med student Taj Kothari for coming in to speak to all of our 5th graders about being a doctor! The students were able to ask questions about careers in the medical field and were able to experiment and explore with medical equipment (hello ultrasounds and suturing pigs feet!)

This week, we finished up most student presentations of their medical cases and diagnoses/treatment plans, and we also launched into our final unit *Dream Big: A Bridge Building Mini-Unit*. In this unit, the students will learn what it is like to be a civil engineer and they will be tasked with forming a company, earning money, and designing a toothpick bridge that we will test to see how much weight it can hold. We have a field trip scheduled in this unit, as well! While I thought I was going to need to change the date, we are sticking with the original plan for this trip being on **Wednesday, May 10**. This will be your child's FINAL class day with me, and we will head to the IMAX theater to see the movie *Dream Big* and will also head downtown Grand Rapids to take a bridge walk. I'll be in touch in the near future for opportunities to chaperone this trip.

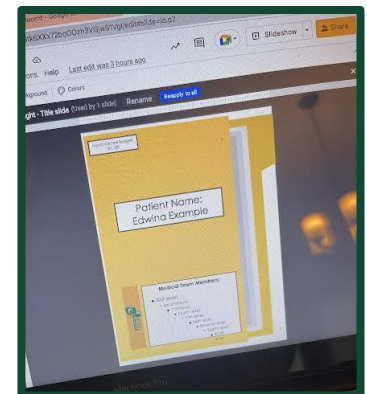
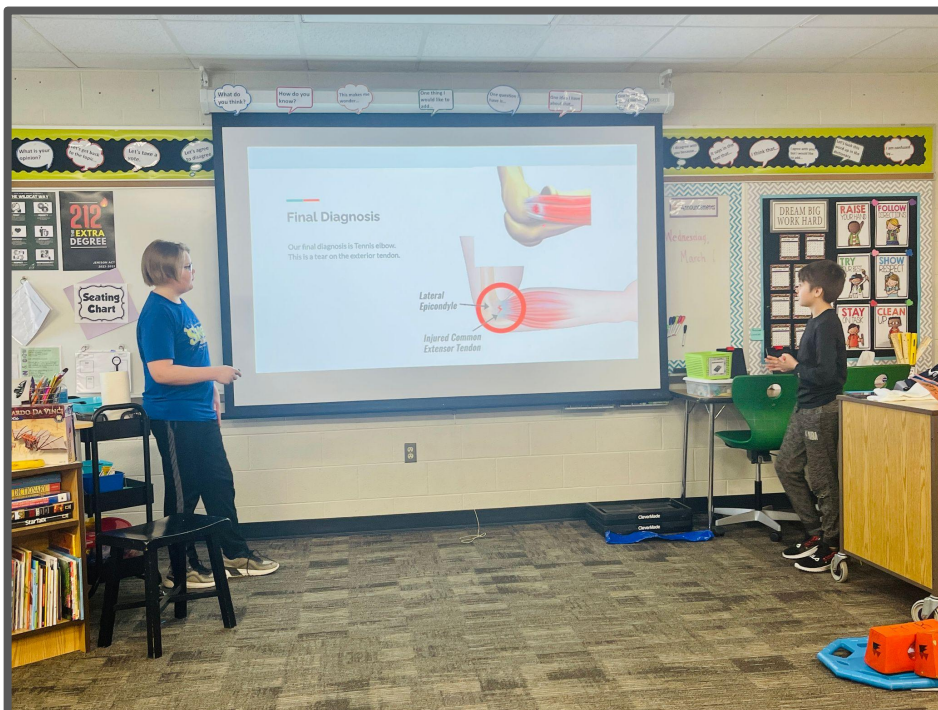
GRADE-LEVEL UPDATES

5th Grade Continued



After sharks and chicken wings, these fifth graders weren't phased by the arrival of pigs feet, and many were ready to jump in and give suturing the skin a shot! Thank you Dr. Kothari and Dr. Rotman for your time!

Above: Making models of the digestive tract.



In class, students created professional presentations (including citations and a bibliography) to present their findings from their medical case. I was very impressed with their public speaking and professionalism. Above: Each medical team had a case file to work through as part of our simulation. They even had a budget to stick to when ordering medical tests!

GRADE-LEVEL UPDATES

5th Grade Continued



To the left: All bandaged up! Below: You know I HAD to give the suturing station a shot!



We had some GREAT sports who were willing to volunteer to have an ultrasound done! Students were able to see the liver, kidneys, and even the heart! We observed the heart valves moving and the blood flow, as well!



GRADE-LEVEL UPDATES

5th Grade Continued



Students were able to take their pulse and use a variety of other fun instruments! I was pretty impressed with some of the students suturing abilities!

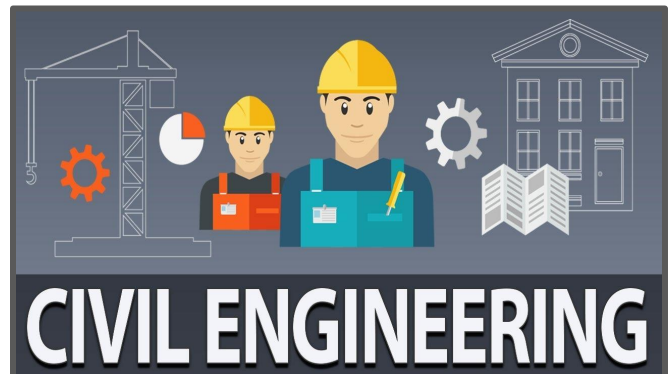


We were able to view some pretty interesting x-rays from some unique cases! Most of all, we had some really great conversations about school, goal setting, and how we can start to make great choices now to apply our gifts and talents for the future.



GRADE-LEVEL UPDATES

5th Grade Continued



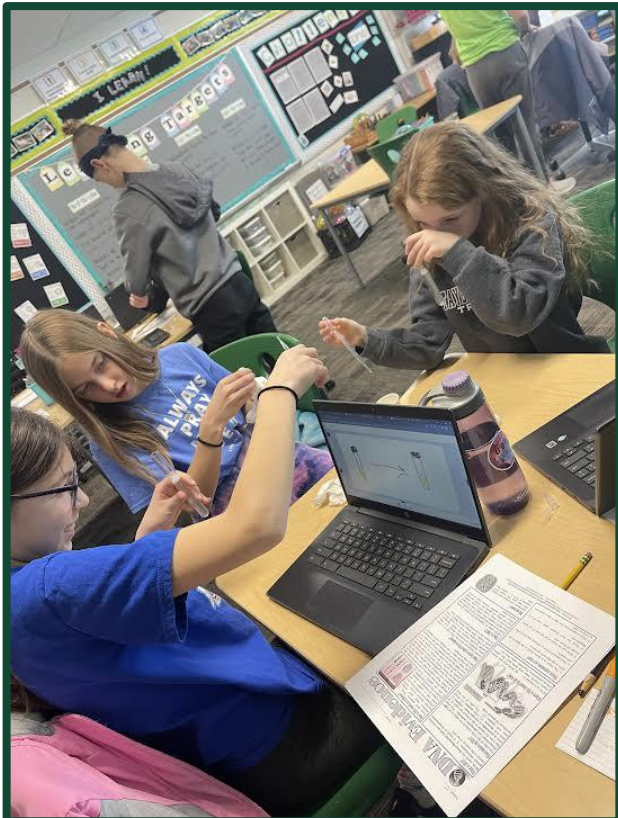
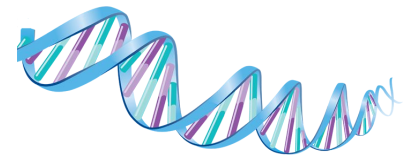
GRADE-LEVEL UPDATES

6th Grade

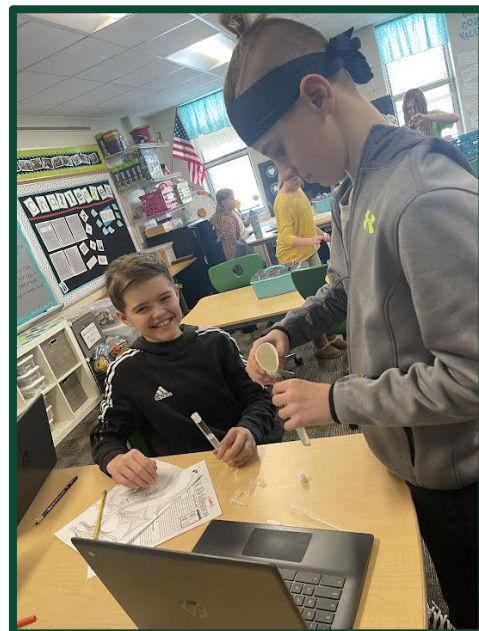
We finished up our *Forensic Science Sleuths* unit and are almost done reading [The Westing Game](#). I hope you enjoyed hearing about some of our in-class labs and activities that accompanied this unit (or perhaps saw some artifacts that came home from ACT!). From taking our fingerprints to isolating DNA in our cheek cells to learning how mixtures separate by using paper chromatography techniques, this unit has been tons of fun!

Over the next few weeks, we will begin our final ACT unit: *Memories are Made of This: An Introduction to Psychology*. While a few of our sessions will focus on the brain and how memories are stored, students will also use some of this unit to reflect on their elementary years and ACT career. It is bittersweet to think that our sixth graders will be moving on to the junior high next year (and most are ADAMANT about not even admitting it yet!), but I know we'll have some powerful conversations about how to use our gifts, talents, and abilities as we think about the upcoming transition to and leaving elementary school!

Parents – I'm looking into the possibility of a final sixth grade ACT celebration. It's been a few years since I've held an evening to commemorate and get the whole group of 6th ACT students together, but I thought it might be nice to start this back up. If you might be interested in helping to plan such an evening, please let me know!



Sixth graders worked to isolate DNA in their cheek cells.



GRADE-LEVEL UPDATES

6th Grade Continued



A simulated blood typing lab. Students used the ABO Blood Typing system to determine the culprit of a crime. I was so thrilled to hear that Cason (pictured above) ordered his own blood typing kit and was able to type his own blood at home using this system! What a cool application of what we are learning in class. I LOVE it when ACT sparks student interest!

We've also thoroughly enjoyed playing Chess in class!

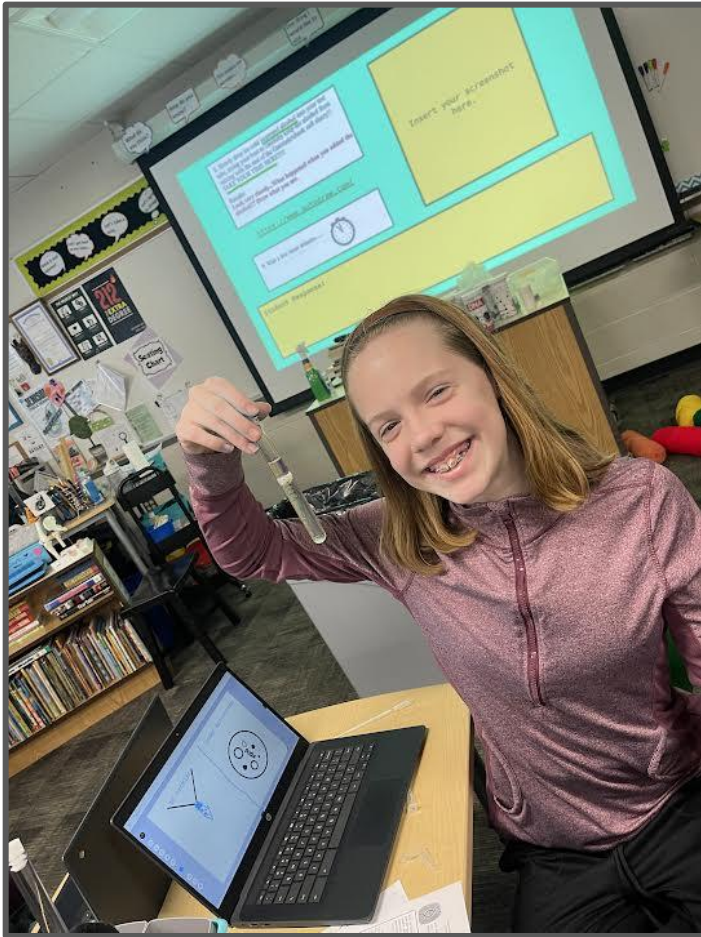


Students working to put together clues from The Westing Game to see if they could make any heads or tails of them. You can tell when you have hooked students when they BEG you to keep reaching the next chapter!



GRADE-LEVEL UPDATES

6th Grade Continued



Students tried their hand at building a models of DNA using Zometool!

We used the computer to make predictions and draw our observations.

CHESS RULES & STRATEGY

Setting Up the Board **How They Move**

Setting Up the Board: The board should be set up with the white square in the upper right on the right, "white on the right." If this isn't taking the king and queen will be moved up. Shake hands across the board before the game starts. White always moves first.

Rank and File: Going from left to right the vertical rows on the board, called files, are labeled a through h. The horizontal rows, called ranks, are numbered 1 to 8. The 1 is white's side of the board. It is black's side. This system can be used to show what square a piece is on, or, in a way like the game Go, to show when the board is set up the squares that will be on the white player's left side.

PIECES AND HOW THEY MOVE: Once you move a piece and take your hand off it, you cannot change your mind, unless your opponent tells you, which they do not need to do. However, you may touch a piece, consider a move, and put the piece back in its original position, as long as you don't take your hand off the piece during the process.

Pawn (P): White pawns start on rank two, black pawns on rank 7. The first time a pawn is moved it can move forward either one or two squares. It cannot jump over another piece. After a pawn moves once, whether it was moved up one or two, a pawn can only move one square forward at a time, and it cannot move backward. If a pawn advances to the end rank (8 for white, 1 for black) then it is promoted, which means it is exchanged for any other piece, with the exception of a king or another pawn. No pieces are moved from the chessboard (not in the way a color can have two (or more) queens at the same time. The pawn's "value" is 1.

KNIGHT (N): Knights move in an L-shaped pattern. A knight moves one square over and two squares up, or two squares over and one square up, one square over and two squares back, etc. as long as the space stays and size of the jump is maintained. The knight is the only piece that can jump over other pieces; it jumps straight to a square without disturbing any of the pieces in between. Knights are generally brought out early, and this is good. The knight's value is 3.

BISHOP (B): The Bishop moves diagonally, any distance along a diagonal, without jumping over any pieces. A bishop that starts on a black square will always be on a black square, so it can only get to half the squares on the board. The bishop's value is 3.

ROOK (R): The Rook moves in a straight line in any direction, any number of squares as it likes, without jumping. Rooks shouldn't usually be used until later in the game, and should almost never be brought out at the beginning, because they will be harassed by pawns and other pieces, wasting time for the player who brought out the rook. This piece might also be lost by being brought out early, which is bad because the rook is valued at 5.

QUEEN (Q): The Queen is the most powerful piece, as it can either move diagonally or in a straight line, which makes it like a bishop and rook put together. The queen cannot move like a knight. When the board is set up the queen always starts on her own color, so the white queen always starts on a white square. The queen is worth 9 points because she can move to so many places on the board so easily.

King (K): The most important piece on the board is the King. The king can move one and only one space at a time, in any direction (left, right, forward, backward, and diagonally). The capture of the king is the objective of the game.

3,000 x 1,94

Benefits of Readers Theater

- Improves reading fluency
- Improves comprehension
- Improves vocabulary acquisition
- Improves motivation: Kids want to READ!!!
- Improves self confidence
- Allows challenged readers who are not often given speaking parts an opportunity to be included

The game of chess comes into play as part of the plot of The Westing Game, we've been enjoying playing in class. We've also been enjoying the book as a Reader's Theater!