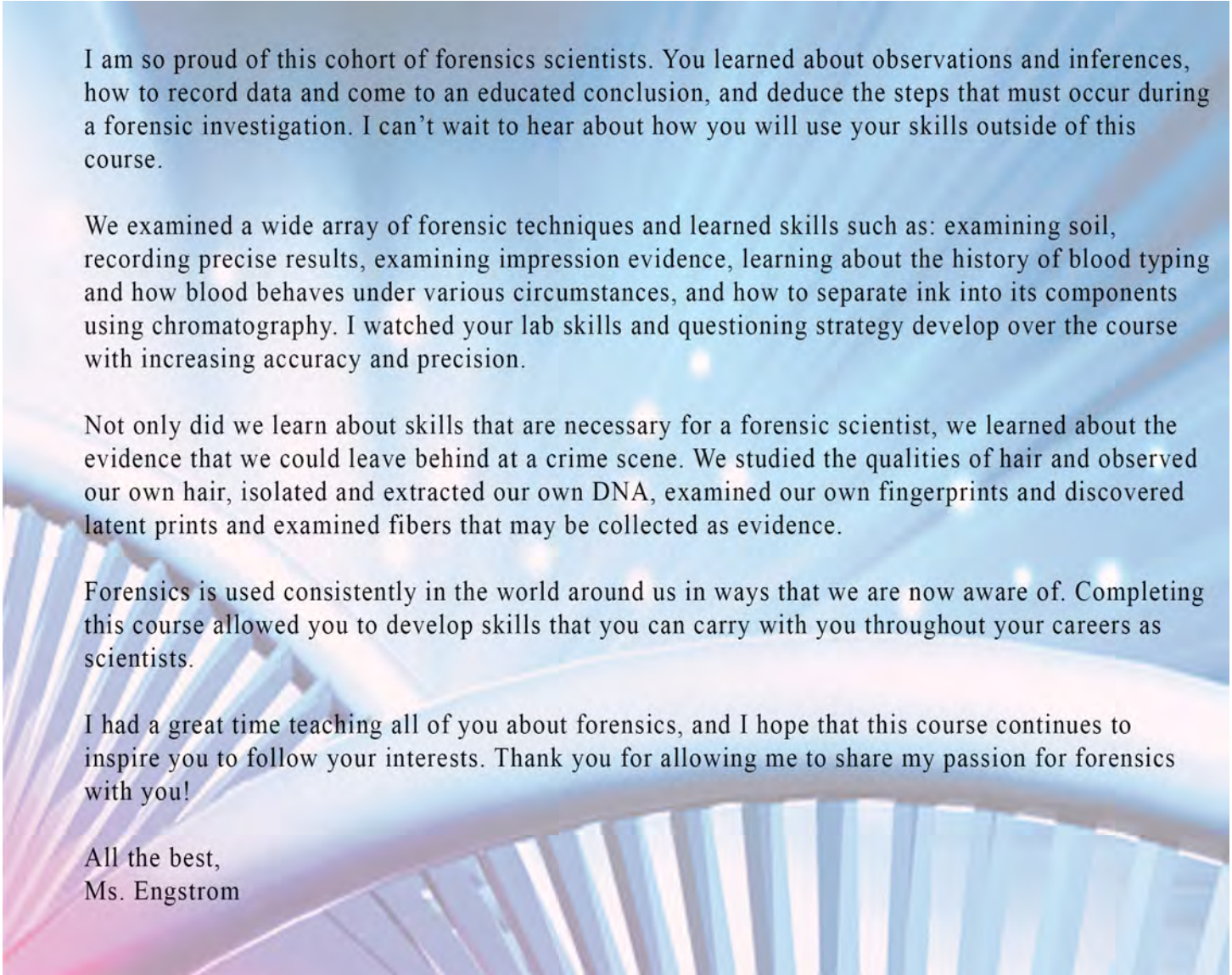




the stars  
challenge

**Forensics**  
Fall 2018





I am so proud of this cohort of forensics scientists. You learned about observations and inferences, how to record data and come to an educated conclusion, and deduce the steps that must occur during a forensic investigation. I can't wait to hear about how you will use your skills outside of this course.

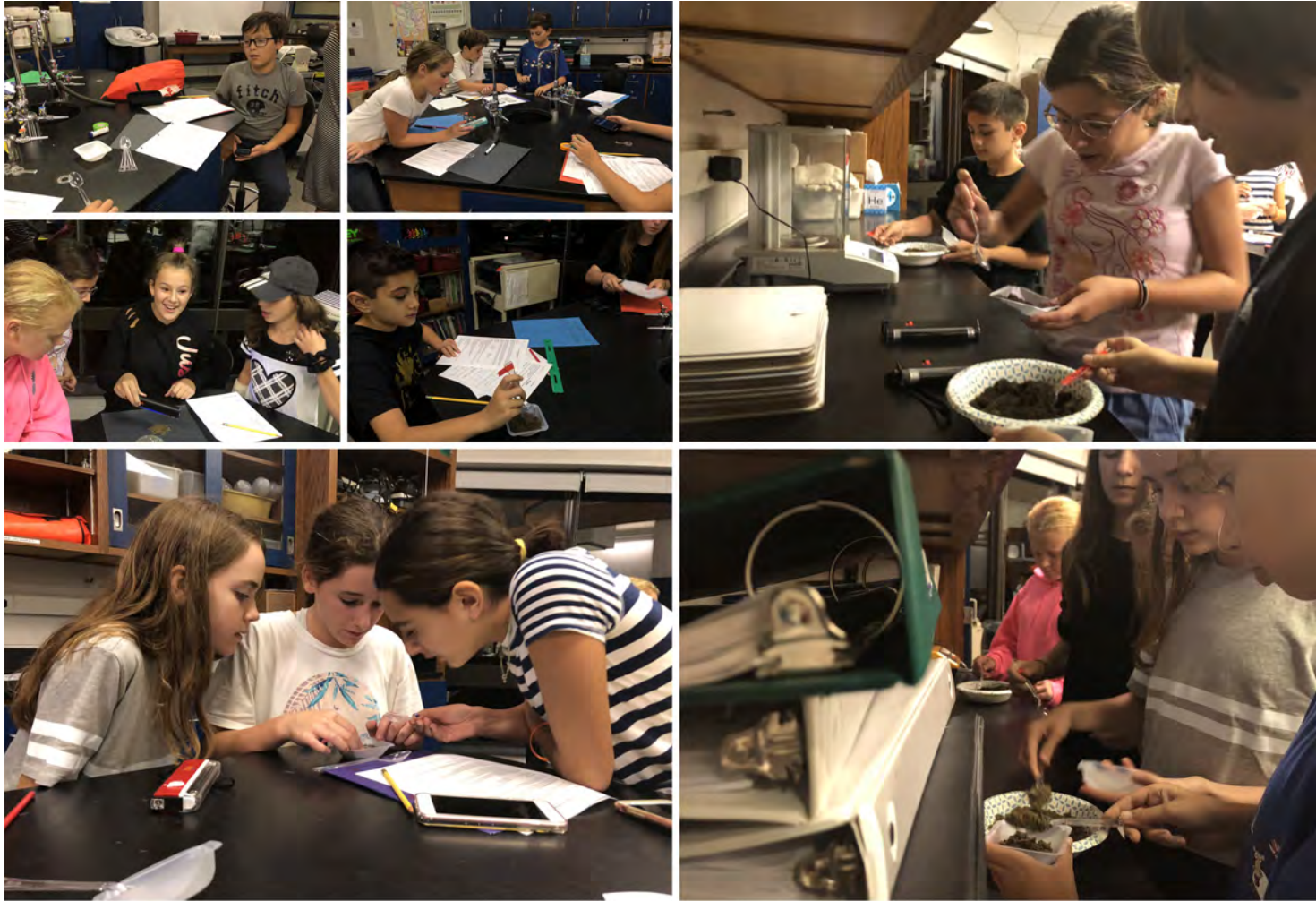
We examined a wide array of forensic techniques and learned skills such as: examining soil, recording precise results, examining impression evidence, learning about the history of blood typing and how blood behaves under various circumstances, and how to separate ink into its components using chromatography. I watched your lab skills and questioning strategy develop over the course with increasing accuracy and precision.

Not only did we learn about skills that are necessary for a forensic scientist, we learned about the evidence that we could leave behind at a crime scene. We studied the qualities of hair and observed our own hair, isolated and extracted our own DNA, examined our own fingerprints and discovered latent prints and examined fibers that may be collected as evidence.

Forensics is used consistently in the world around us in ways that we are now aware of. Completing this course allowed you to develop skills that you can carry with you throughout your careers as scientists.

I had a great time teaching all of you about forensics, and I hope that this course continues to inspire you to follow your interests. Thank you for allowing me to share my passion for forensics with you!

All the best,  
Ms. Engstrom

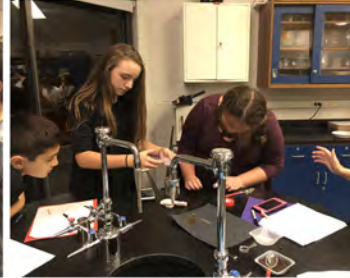


We examine various soil samples using magnifying glasses and UV lights to identify the unknown sample.



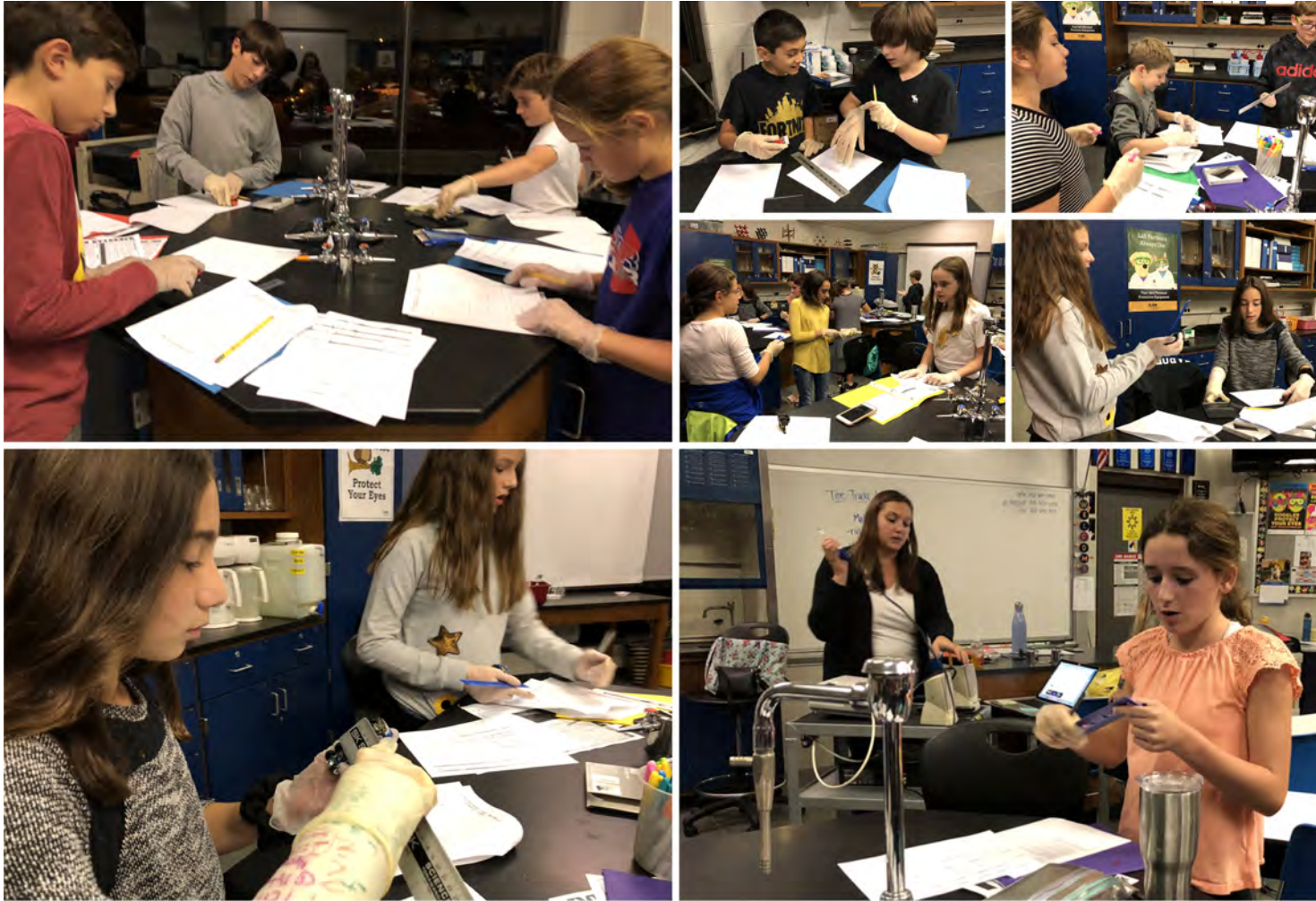


We continued to view soil samples while considering Locard's Exchange Principle.





We develop a protocol for recording observations and data.



How do we match unknown impressions? We learned about tire track impressions, how to make our own tire tracks, and how to make measurements to observe differences.





We determined the uniqueness of our own bite marks and how forensics utilizes bite mark impression evidence.



We examine how various materials burn or melt and how fibers are identified during an investigation.



We prepare microscope slides of our own hair, record observations and identify structures within human hairs.



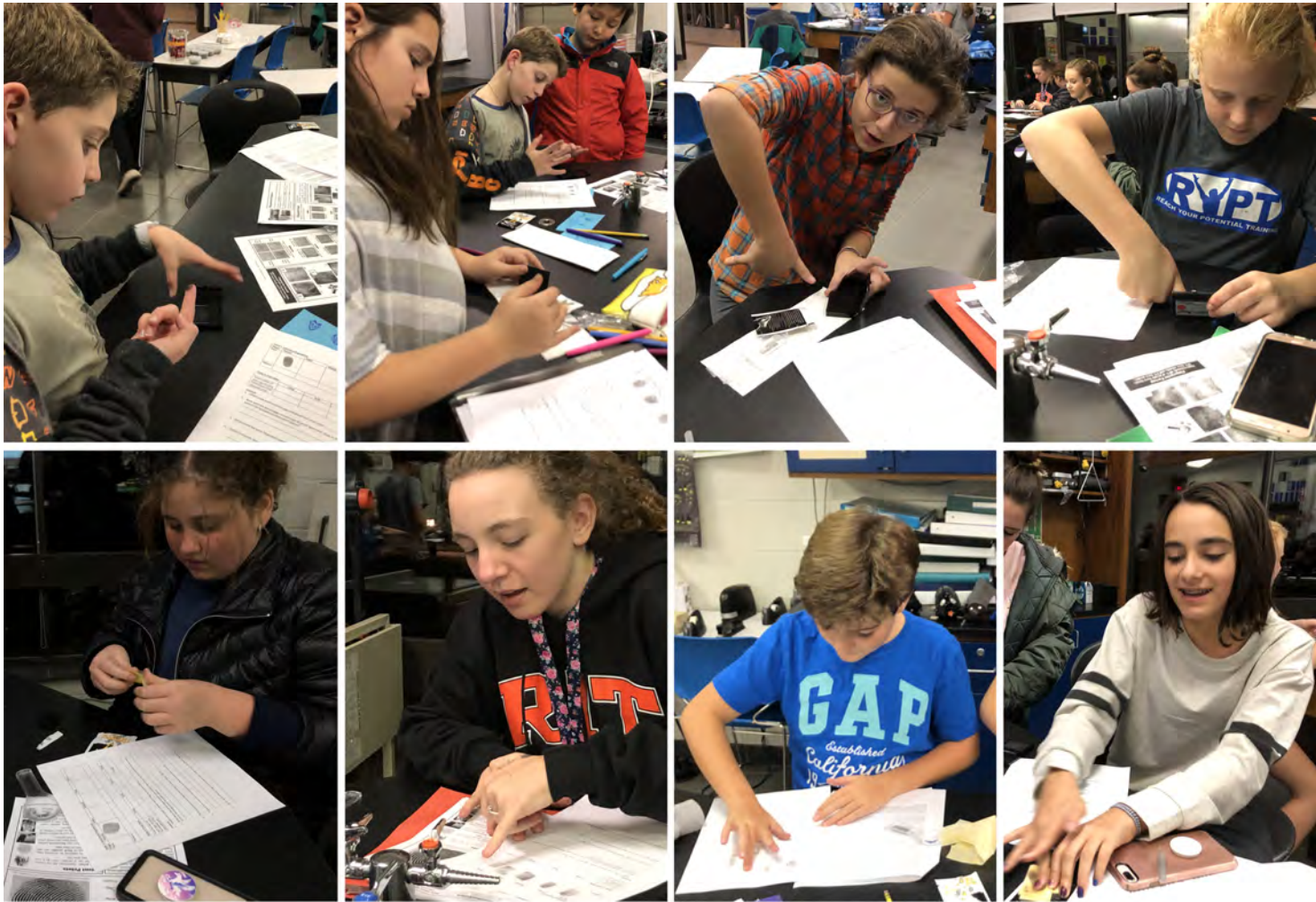
We isolated, extracted and observed our own DNA!



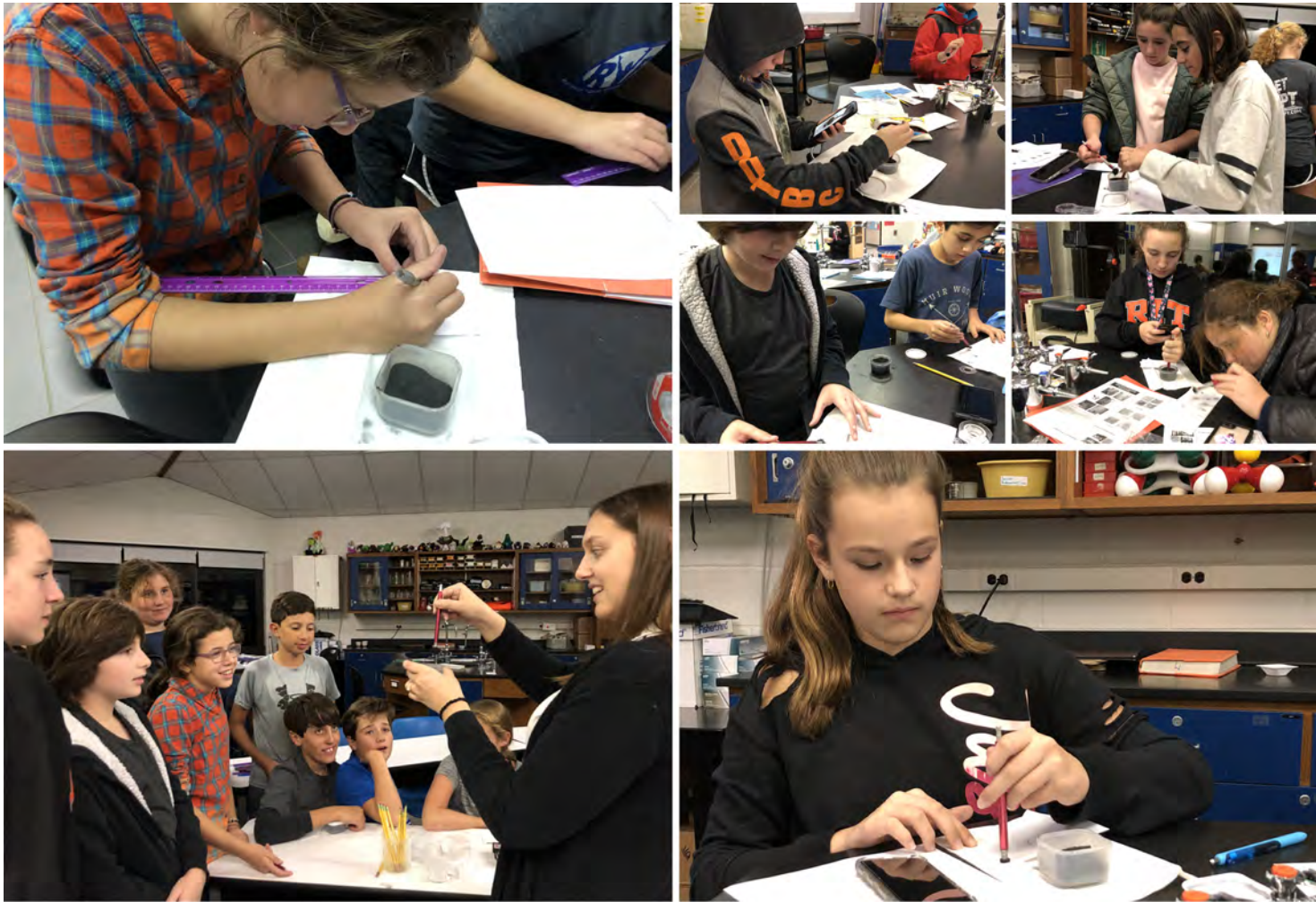
Paper chromatography is performed to identify the origin of ransom notes and different pens used.



Candy chromatography is performed in the spirit of a Forensic Halloween!



We view our own fingerprints for unique characteristics.



We are able to lift latent fingerprints using magnetic powder.





We observe blood spatter from different heights and angles.



We learn about the fire triangle and that all factors are necessary for a fire to continue.



Is smoke from a fire part of the fire triangle?



Yes it is! Ms. Engstrom lights a candle by blowing it out and reigniting the smoke.



