As on any farm, our rhythm at the middle school campus follows the seasons. Midwinter is a time for quiet, academic productivity and planning while we wait for the burst of life that spring will bring. Now is the time to study genetics and the likely dominant and recessive alleles that will determine the physical characteristics of our baby goats that we’re expecting to be born here in March and April. The genetics of the goat herd, chicken flock and honey bees all determine traits for survival, temperament and physical appearance, and this is the time of year to study the how and why of certain inherited characteristics. As we wonder how our honey bees are faring in the frigid temperatures, we are reading a new novel, *The Bees*, and using it as a platform to better understand literary technique, life in the hive and, metaphorically, ourselves. Bees govern themselves undemocratically, and the students are also studying government to begin to grasp how people organize themselves and manage power, for better or worse. Math and Spanish lessons take place every day year-round, and trips to Hartford, knitting our own sheep’s yarn with Úna, yoga with Ellen Brown, electrical circuitry with Brian Amaker, music, art, sledding and skating have added joy and variety to our snowbound days. Now it’s time to turn over the reporting to the real experts on what happens at the farm campus: the middle school students themselves. Enjoy!

-Caren
Barn Architecture
By Wave Thomas

The barn at Millstream Farm is an interesting bundle of wires, pipes, wood, concrete, glass and old contraptions. Built in the 1950s as a dairy barn, part of it has been converted into our classroom, which used to be the pasteurization room. Our media room was once the refrigerator that held the milk; hence the thick metal door. The barn’s architecture is sturdy, unique and bizarre. The walls and ceiling are wood, but the floor is concrete with inclines and declines that show where the old cow stanchions and manure gutters used to run. The gambrel-style roof soars with wooden “balloon framing”. The barn’s design allows for easy access to every room, animal stall and hay loft. A long hallway, wide enough for a tractor, stretches from the front to the back of the barn and enables animals, supplies and people to move around easily. In 2014, the barn was voted by Congress onto the CT State Register of Historic Places. It was honored for its historical and cultural importance. The barn is a masterpiece of materials; it is just the perfect experience for us. It is amazing to look at the barn and think of the great people who designed it and the dairying that used to be so important to Connecticut.
Dissection
By Emma Strempfer

In January, the students at the Middle School dissected rats and frogs with Tom Noonan, a scientist who works at the Talcott Mountain Science Academy. We were pleased to have him return. He had visited in December and presented an interesting series of lessons on chemical reactions. Now, it was time for some biology. The dissection of an animal was unfamiliar to me, since we had never done one in Elementary. The smell of formaldehyde was dreadful, but worth it, I think! We wore latex gloves, and many of us were squeamish at first, but overcame our reluctance. It was interesting to learn about the anatomical differences between a rat and a frog. We learned about the parts of the body, and how they got their names from Latin and Greek roots, how to hold and use dissection tools, and also a little bit about evolution and classification. Our lessons from earlier in the year about the digestive system made more sense when we were able to relate them to the internal organs of the animals. There was a lot of lively discussion among the students. A few students who wanted to go even further after the expert left dissected the brain, cutting through the skull.

Creating Masks in Art Class
By Kati Kruzcek

These past weeks we have been making decorative masks in art class. First we made masks of our own faces and then we added animal features, such as trunks and pointy ears. Using a hot glue gun, we pasted animal features made of cardboard onto our masks. (Being burnt by the glue gun hurts!) Madi is making a dog, Therese a duck, Emma an elephant, Sophia a leopard, Jack a monkey, Anna a bunny, Emily a raccoon, Cole a bear, Youssef a lion, Scott a Basset Hound, Wave a Jack Russell Terrier and I a wolf. After the animal features are attached, we will decorate the masks with beads, sequins, felt and more. That will be the best part! It is a lot of fun to see the masks come together right before our eyes.
Knitting
By Youssef Amer

In September, our sheep, Snoopy and Casper, were shorn and we sent their wool to the Still River Mill to be scrubbed and carded. Some of the wool was made into yarn and some into roving, which still needs to be spun by us. Our head of school, Ms. Una, picked up the wool at the mill for us and came to the classroom to teach us how to knit different types of stitches. Everybody is going at his or her own pace with the knitting and learns comfortably. When we master some stitches, we will choose projects and knit scarves, hats, socks or whatever we wish. We will also color some of the wool, using natural dyes we made in the fall from plants such as golden rod, beets, onions and pokeweed.

Skating and Hockey
By Anna Foster

Right next door to our classroom is a large pond. During the winter months, it freezes up nicely and we have ourselves a skating rink. Skating on a pond is very different from skating on a rink. Snowy trees and wildlife are all around, and little animals leave their footprints in the snow. The ice is bumpy and irregular in some places; the thickness and quality of the ice depend on weather and precipitation. Mostly, the ice is smooth this year, but you can hear the crack of the ice shifting, and of course there’s always the thrilling fear of falling in. The second we finish our morning lessons, we all scarf down our lunches, eager to have a good hour on the ice. Some of us just skate around practicing our skills, while the rest of us play a game of hockey. Caren has a bunch of hockey sticks and a net so it makes for a great game. The teams are usually boys vs. girls so as you know it can get very competitive. I know I can’t stand it when I have to grit my teeth and shake hands with the boys when they win.
Barn Work in the Bitter Cold
by Emily Kruzcek

Doing chores on the farm is a fun job. Taking care of the sheep, chickens, goats, and of course the kittens, running around getting their food, water, and other necessities, it sure is a busy, yet enjoyable activity. From autumn to spring, it’s a joyous time, but winter is another story. The bitter cold biting at one’s fingers and toes, the frosty air nipping at one’s face, it’s enough to make anyone want to go back inside the classroom and stand next to the pellet stove. We collect the hens’ eggs, but they freeze and break within hours and we have to toss them out into the pasture. No matter how much one might bundle up in winter gear, it’s never enough to keep the cold from finding a way into the soul. But the animals need care and no matter how cold it is, we all find a way to force ourselves into the freezing concrete barn.
Oral History Project
By Cole Binzer

For my oral history project I went on a road trip with my grandpa and interviewed him about his time in the Army during the Vietnam War. In the second week of December my dad and I flew to Lexington, Kentucky, to help my grandpa move to Las Vegas. When we got there we loaded up the trailer and left the next day on our journey. We drove five days, 40 hours, through eight states and 2,500 miles. My grandpa, who was an Army officer for several years after college, fought in only one battle during his year in Vietnam; however, he called the shots for many battles. I interviewed him on our way from Albuquerque to Tucson. We talked for about 40 minutes and edited the video footage down to about 20 minutes. I learned a lot about my grandpa, not just about his time in Vietnam, but also about his time in Germany after the war. He strongly believed in the fight against communism and in giving the South Vietnamese people a chance at democracy. When we got home, as part of the editing we put in some pictures of the Vietnam War and my grandpa, and the project was finally ready to present.

The Goat Scare
By Therese Brady

On the coldest day of the year, we worried about one of our goats, Daisy. She was shaking and shivering, and refusing to eat. She stood still, as if in shock, and her jaw was set. We didn’t know what to do because we had never seen this happen. We tried rubbing her and hugging her to give her warmth. She didn’t seem to like that. Then we tried to frighten her and chase her to get her moving. She began to nibble a few raisins that we offered her. She started to shiver less and to eat some grain. We kept at it. Eventually she had eaten her day’s ration and we were confident she was better. She went outside and joined the other goats at the hay rack, but we had had a scare.
By Sophia Dyer

The Supreme Court Building, designed by Don Barber, was constructed in 1908. The room itself is adorned with a balcony and panels of oak, Connecticut’s state tree, as well as a portrait of Stephen Mix Mitchell, the state’s first chief justice. Two immense murals decorate a wall and ceiling of the room painted by renowned painter Albert Herter. The *Fundamental Orders* is painted on the back wall, and *An Allegory of Education* is painted on the ceiling.

During a recent trip to Hartford, the middle school visited The Supreme Court. Upon entering the building we sat in chairs where the hearings, all public, are held. The bright blue carpet that covers the area of the room is imprinted with the state seal, three grapevines representing the three original towns established in Connecticut: Hartford, Windsor and Wethersfield. These same grapevines can be seen everywhere around the room, decorating backs of chairs, even carved into the panels on the wall. We were fortunate to have the opportunity to meet State Justice Richard A. Robinson. Before taking on his role at the Supreme Court in 2013, Justice Robinson, who graduated college with a degree in Fine Arts, served on the Appellate Court. We had the opportunity to ask some pressing questions about life as a justice. During the trip to Hartford we also visited the Capitol building and had a delicious lunch at a Dominican restaurant, El Caribe.
Shiitake Mushrooms
By Scott Black

We recently grew Shiitake mushrooms in the classroom. We grew them from “patches” made of enriched sawdust that had been colonized by Shiitake spores (*Lentinula edodes*). When the mushrooms had grown to full size, we cut them into slices and dried them in the oven. We have grown three large, one medium and one small shiitake mushroom from our first patch. We are then going to re-soak the patches and grow more. Drying, re-soaking and re-growing the patches is a long process. We’re hoping to sell the nutritious Shiitake at our next sale or eat them if we don’t get enough of them to sell.

Micro-economy wares:

Yoga with Ellen
Based on genetic studies from Millstream lab, we predicted our goat to look like this.