## Strategies my students will use to demonstrate their understanding of the content:

- Morning Meeting: Share question- allow students to share a connection, observation, explanation of something that happened in their lives that connects to science content
- Big idea question to start our day: students will have a central question that they will complete for bellwork. This could be a poll displayed on the Smartboard, a questioning activity, inferring about a particular topic based on what we have learned so far, or simply a recap question where students will illustrate or write their thinking.
- Socrative: I will use this in group work a lot because now have 7 ipads in my classroom.
   This will help create friendly competition while also giving me real time data about student understanding.
- Teacher Time in school: Several times throughout the week, my students take the lead on instruction. This might be in a small group setting help facilitate an investigation or small discussion. Other times students conduct a read aloud about our topic, and they ask comprehension and discussion questions as they read to the whole class. This helps clear up misconceptions, it gives me a good indication based on their questions and also how they respond to their classmates' answers. There are also times where students discover something through reading or a life experience and they give a mini-

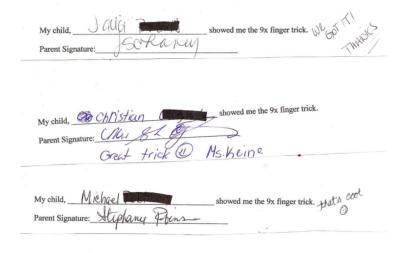




presentation about their discovery.

Teacher Time at home: When students learn something new that they are very
enthusiastic about they can't wait to teach anyone and everyone who will listen. This
strategy helps reinforce the concept by verbal or visually teaching someone the content
again but putting it into their own words. I have created teacher time moments at home,
where students will go home and teach someone at home about the content we learned

in class. The parents will sign a slip saying they did so, and the student returns it back to class the next day. Following this, we talk about how the experience was, what hiccups they had and correct any questions or misconceptions. Best of all, the parents love it and it creates more connection from home and school.



• Using other classrooms for teaching moments: This is done in two different ways. First, my students from last year will come back to help teach my students about the content. This is beneficial to my current students because they get a different perspective from someone who was in "their shoes" last year. Also, it helps recollect

information and content for my past students by remembering content enough to have to teach it to someone. This message is reinforced throughout the year as I teach so that my students will take responsibility is retaining the information so that they can be the kids that come back the following year to help me teach the concepts to my new group of students.





3rd graders helping with editing writing and proofreading marks

3rd grader reinforcing weather concepts

Also, my current students will go to other classroom and teach students about what we are learning. It is not just a presentation, but an engagement activity, where that class now becomes a part of our learning and our real-world application.





My students made recycling bins for all the classrooms in the school. They gave presentations about conservation and created a school-wide recycling initiative.

## **Application into new situations and different disciplines:**

Real-world application and cross curricular integration is what my classroom is all about. Often times, the lines between content areas are blurred and students are not able to articulate which subject we are learning because so

much of what we are learning is involved in everything we do. Some examples are included below.

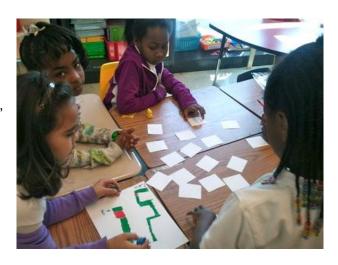


Recyclable vs Garbage Activity: students cleaned up a local park splitting up into two team, recyclers and garbagers. When they came across an item to pick up they had to decide who was to pick it up. We helped our community while also learning about what items are recyclable.

This year I want to have my students discover the Science behind recycling by understanding who certain material are recyclable and why other are not. Visiting a recycling plant would also be a great extension.

Sequencing Game: Students were learning about the reading and writing skill of sequencing. Their project was to design a game where they had to write directions in sequence that their classmates could follow to play their game successfully. Students chose content from science, social studies, grammar, and other reading skills. They then played their games to help practice reading sequence and then content that they game was practicing.

Having students create games around the science content we are learning would be a great way to reinforce understanding.





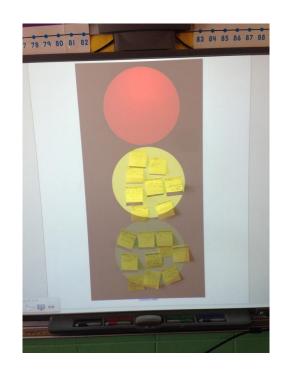
Author's Purpose: Students used newspaper articles to show the three types of author's purpose: to entertain, to inform, to persuade. A Science application of this could be having students look through the newspaper to find examples of explanations in weather, blance/motion, states of matter, etc.

## Feedback through self-assessment and peer feedback



Visual pre and post assessments help students see where they are on the content. It also helps understand that everyone is at different place and that your level understanding will change over time. A visual stop light allows my students to self-assess their understand of the lesson, ask questions and see their progress over

time. Students are in control of their assessment in this strategy using a provided rubric. Students are able to ask question or make comments on post-its. This is a great time to clarify understanding and address misconceptions.





Students take "silent gallery walks" around projects on the due date day. Projects have not been presented yet. Students walk around with post-it notes asking questions, making comments, and making connections. This is great peer feedback at a first glance for students to see if they were thorough enough in their project that it can be understood without any presentation. If student receives a lot of questions, they have the chance to take it home one more time to clarify or add detail to help make their projects stronger.

I chose the DreamIT concept of Science is everything and everything is Science because I want more integration of Science into everything we do in our classroom. All the examples listed above show true real-world application and integration of specific units of study. What I want to create is this idea but involving more Science concepts and daily life experiences where Science can explain the phenomenon. It has taken me years to create this authentic learning in my classroom so I am not looking to reinvent the wheel, but just apply these activities, projects, etc.and put a Science spin into everything.

## Some examples that I am brainstorming are:

- meteorology reports for our weather unit
- community service project around gardening during our plant unit.
- newspaper scavenger hunts for science examples and explanations
- science discussion that have an argumentative side
- exploring states of matter in our community
- Science careers
- animal habitats converted into zoo captivity spaces
- The effects (positive and negative) insects have on our lives