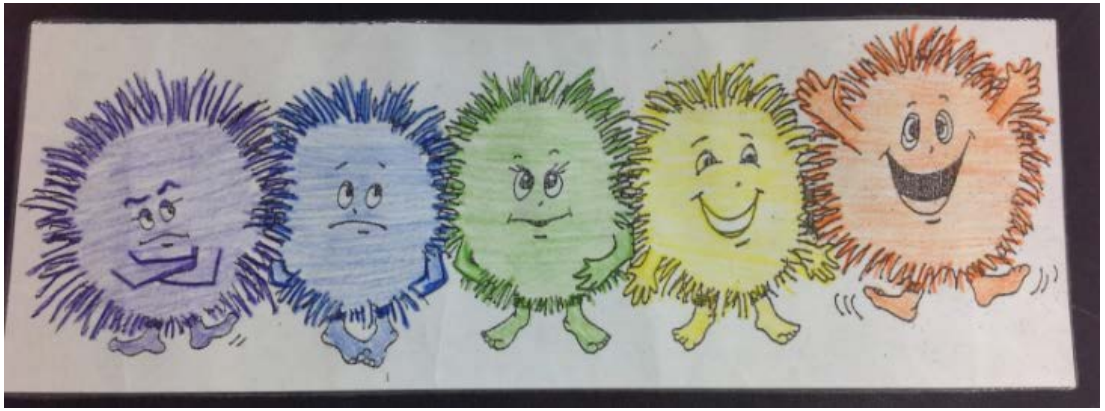
Start-Up and On-going Checklists:

Classroom Management:

What Strategies am I modelling to help my students develop metacognitive skills?

This classroom uses three colours of snap cubes to show their understanding. Red on top of the tower indicates “stop”, I need help with this topic. Green on the top of the tower indicates the student is “good to go” and yellow on top indicates that the student isn’t sure, they may need a bit more help with the topic.

Another classroom uses their Tribes Tribbles to show their understanding. They are asked to place their eraser on the Tribble that reflects how they are feeling.



An intermediate teacher uses a similar idea to the snap cubes, but within a checklist.

Self-Reflection 5 | 9

	Red	Yellow	Green
I can create equivalent fractions			✓
I can compare fractions		✓	
I can add fractions with different denominators			✓
I can order fractions, decimals and whole numbers		✓	
I can convert improper fractions to mixed numbers			✓
I can create a table of values from a geometric pattern		✓	
I can find the general term (nth term) from a table of values		✓	

Samples and Illustrations

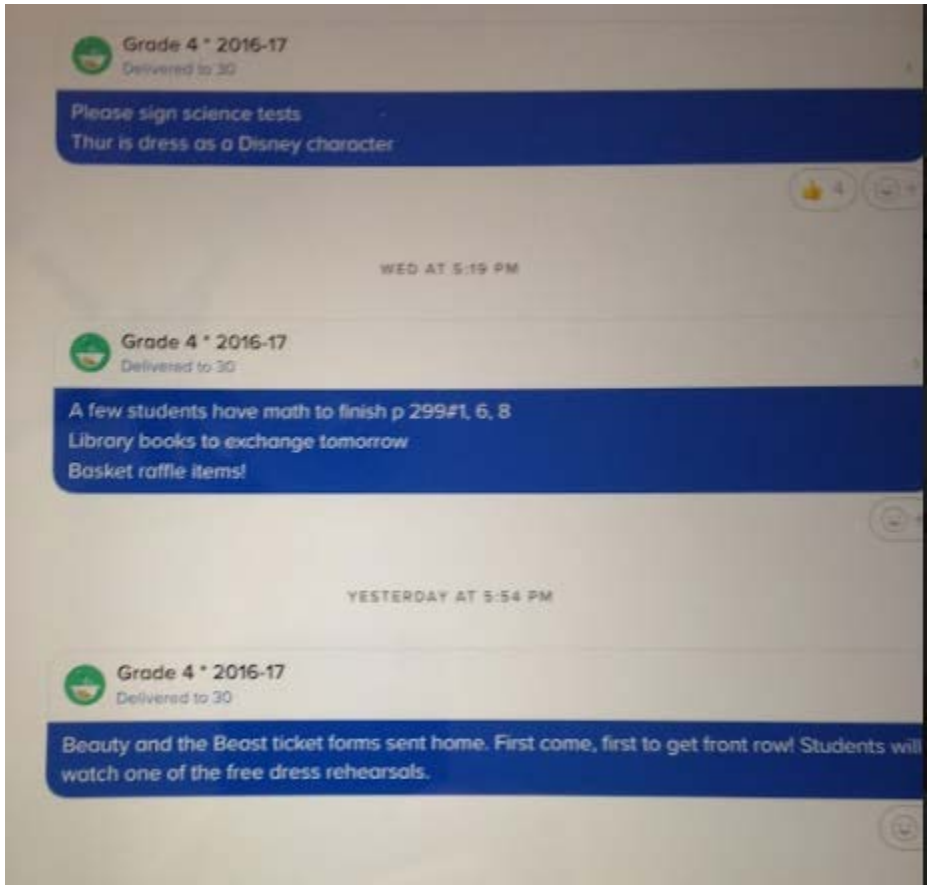
Thumbs up, down and sideways are utilized in many classrooms, across a variety of grades, as a quick way to assess student learning and understanding. Some classrooms use a private thumb, hands held close to the body, for a more private sharing.

How will I enable students who are absent to access lesson materials?

This classroom teacher has put an old stand up file holder to a new use. A file folder for each student creates a holder for handouts that can be easily accessed by absent students upon their return.

Samples and Illustrations

Some teachers are embracing technology to help parents and students keep track of what's going on in class. In this Grade 5 class, the Remind app is used to inform parents of special days and homework assignments.



Classroom Set Up:

How will I arrange the seating chart for the first day?

A secondary school educator shares:

- I start with an alphabetical listing (assists with attendance and learning names).
- I talk to other classroom teachers and learning support teachers to see if the alphabetical listing created any ‘hot spots’ and rearrange as necessary.
- I have pairs of desks in my class, so I often adjust the alphabetical arrangement to allow for boy/girl pairs which can also reduce ‘hot spots’.
- I try to take time to memorize the names of my students (first and last) in the seating arrangement order so that when they come to my door the first day, I ask for their name and I can point out their seat without having to check a seating plan. It is worth the time to know their names on the first day – it sets a tone of not only classroom management/order, but I find that students like it when you know their name.
- This photo shows the setup of pairs of desks in the classroom. I have a pair of desks at the front for positioning my binders, attendance sheets etc. You may notice that the openings on the desks are ‘backwards’- the opening faces the front, rather than being open on the side with the chair. We do this to help alleviate garbage being left in desks and also to take away the temptation for students to attempt to hide their cell phone inside their desks for texting.

Samples and Illustrations

In providing for flexible groupings, how have I considered my easy access to each student?
How can I arrange for traffic patterns that are conducive to an efficient and non-disruptive learning environment?

An educator shares:

- I position desks in pairs in order to promote math talk. This reduces the number of aisles, thereby making each aisle wider. The pairs of desks can be easily turned to create groups of 4 as needed. It is also important to leave space, if possible, between student chairs and the desk behind. This will provide more pathways for the teacher (and students) to move throughout the room.
- Some classrooms have the desks in groups of 4 at all times. This does provide for wider pathways and quick access to students; however, it can mean that students have to turn their bodies to focus their attention.
- Both pairings and groups of four have their advantages. We have found in our school that having the pairings as our standard set up and then moving to fours as needed, is the best solution for us.
- It is also important to ensure there are no book bags in the aisles. If students need to bring their backpacks to class, provide a central location for storing backpacks to eliminate the clutter of aisles.
- The wide aisles between pairing of desks are helpful.

The Math teacher rearranges the desks regularly depending on the particular assignment or lesson. The desks are normally arranged in pairs, facing the Interactive Whiteboard (IWB) to facilitate pair discussions and teacher instruction. The IWB is used for illustration of concepts and examples. The pairs can be easily rearranged into fours, or separated for tests or individual work. During computer lessons, the desks are often arranged in a circle facing outward to help with teacher monitoring and ease of moving from student to student to provide assistance.

Each arrangement seems to work well for the individual teacher and the type of instruction being offered in each class. Students are aware of the differences and, when asked for their opinion, seem to understand the reasoning and the requirement for the different arrangements.

Northwest CDSB Classroom Dynamics pilot project 2010-11

How will I accommodate the special needs of students?

- Students in wheelchairs, and students with auditory and visual impairments etc., often require carefully considered seating, and/or access to special materials. For these students we:
    - position their desk, if needed, beside shelving or electric outlets so that they have easy access to special equipment and/or materials
    - position their desk, if needed, in an area that ensures they have adequate lighting, a clear line of view and minimal distractions
    - provide other accommodations as required on the Individual Education Plan to ensure the best learning circumstances for the student

How will I set up physical space for education assistants?

- Sometimes Education Assistants will work in a classroom with a student or a group of students. Depending on the nature of the assistance, the EA may require a space to store special equipment/materials and/or the EA may need to have an area to work with the student one on one within the classroom. Sometimes positioning a chair beside the student's desk is adequate and other times, the EA and the student may need an area in the room that is more private, to ensure minimal distractions. This set up should be flexible and depends largely on the learning and support needs of the individual student.

How will my students transition efficiently between working group arrangements?

An educator shares:

- Our default arrangement is pairs of desks. I clearly define other various group arrangements that we will be using throughout the semester. I have cues/commands to indicate a change from our pairs arrangement to other arrangements:
    - "Test Formation" is a cue to separate desks into traditional row formation for a test/quiz/individual assessment.
    - "Meeting Tables" is a cue to move into groups of 4.
    - "Pairs" is a cue to move back into partners.
- If roles are required within the group, we define the roles before students move (e.g., Person 1 is the Resource Manager and will pick up the handouts/materials. Person 2 is the Construction Manager and will ensure desks are arranged quickly/properly. Etc.)

Samples and Illustrations

This classroom has been set up in groups of eight surrounding the carpet space set aside for whole group meetings. The tables can be quickly rearranged for partner or small group work.

The classroom has space set aside for breakout groups or to support students working on a specific task. There is also an area set aside for a teacher to work with a small group of students who may need more assistance with a topic or to go deeper with students who need enrichment opportunities.

Samples and Illustrations

Alternative types of seating allows for students to focus more easily. They can choose what helps them think best! It's also easy to quickly make groups.

Samples and Illustrations

Do I have all supplies and technology at hand and in working order?
What procedures do I have for distributing and collecting supplies and technology?

A secondary school educator shares:

- Supplies like scissors, markers, pencils, erasers, paper and calculators are easily accessible in a common area. I position these on a ‘resource table’ and in a ‘materials bin’ near the entrance/exit door for easy pick up and return.
- If students need paper, a pencil or a calculator, I have them readily available (I purchase inexpensive paper at the start of the school year when there are sales and I collect pencils that students leave behind or drop in the halls!).
- I encourage and remind them to bring their own materials, but I normally do not send them to their lockers for these materials. Doing so disrupts their learning and interrupts the class when they return. In my experience, I have learned to not make this an issue with my students. I provide the materials for them to learn, if needed. This has reduced a lot of stress in my classroom and also a lot of unnecessary trips to lockers.
- Class sets of learning materials such as algebra tiles, square tiles, fraction tiles, dice etc. are kept in bins and stored in a cupboard in a supply room that is shared by other members of the math department. Each classroom has its own set of graphing calculators and individual whiteboards/markers. If we are using the whiteboards or calculators then I position them at the front of the room on the resource table. When we are not actively using them, I put them aside in a secure area of the classroom. Sometimes students pick up their own white boards as they enter the room and other times I have student helpers distribute and collect those materials. However, students always pick up their own graphing calculator.

- There is a resource table and a resource bin positioned at the door. In addition to resources, this is where I would put handouts needed for a particular class.

Samples and Illustrations

- Bin of markers, erasers and individual whiteboards. Each classroom is equipped with one of these bins.
- The graphing calculators are numbered so that each student receives the same graphing calculator throughout the semester.
- A bin of algebra tiles contains individual pre-packaged sets for each student. There are similar bins of materials for other manipulatives.

- There is an area at the back of the classroom for students to hand-in and pick-up work/assignments. If a student is away, they check the black bin (photo on the right) and pick up a handout that has their name on it. (When a student is absent, I put their name on any handouts from that day and put it in the appropriate slot in the bin.) The wire basket is used for student hand-in. In addition there is a hole punch, stapler and tape available for students, if needed. These materials are positioned away from the front of the classroom to help with traffic flow.

Samples and Illustrations

In this elementary classroom, math tools are kept in well labelled bins for easy student access. Student tools are easily accessible and well organized. These tools can then be handed out to groups in a timely fashion.

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Samples and Illustrations

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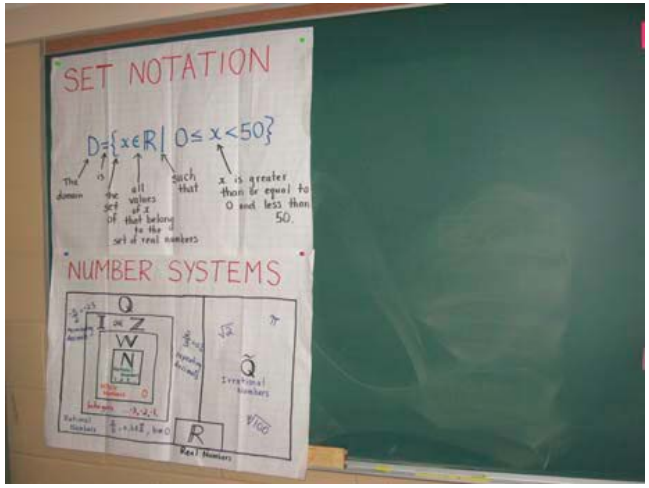
Chromebook carts allow for easy student access, quick number checking and recharging. They are easy to move from room to room.

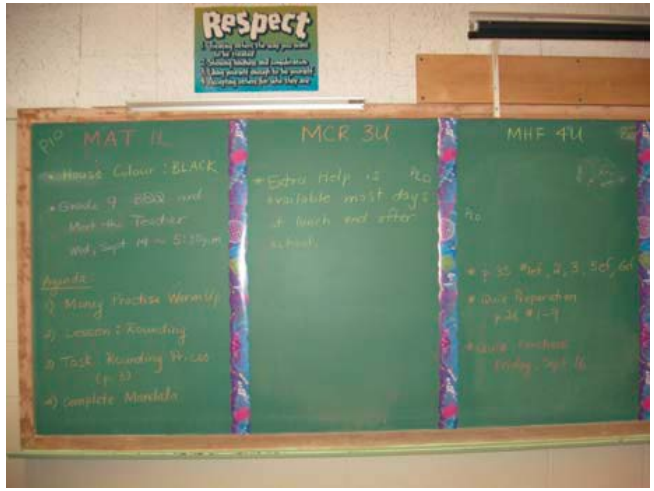
Samples and Illustrations

What areas of the classroom have I defined for displaying visual references to support learning? How often will I change these visuals? How current and relevant for supporting learning are the visual references displayed in the classroom?

A secondary school educator shares:

- There is an extra blackboard and bulletin board space that is used for Word Walls, Strategy Walls, Anchor Charts, and class mind-maps
- It is important for educators to constantly reference this area so that students learn to refer to it independently
- An area for displaying student work/exemplars and a separate area for posting announcements, daily agenda and homework is an integral part of a classroom environment. The various areas are updated or changed as topics evolve.
- Many classroom visuals are generated **WITH** the students (e.g., Anchor Charts, classroom rules/norms, Strategy Walls).

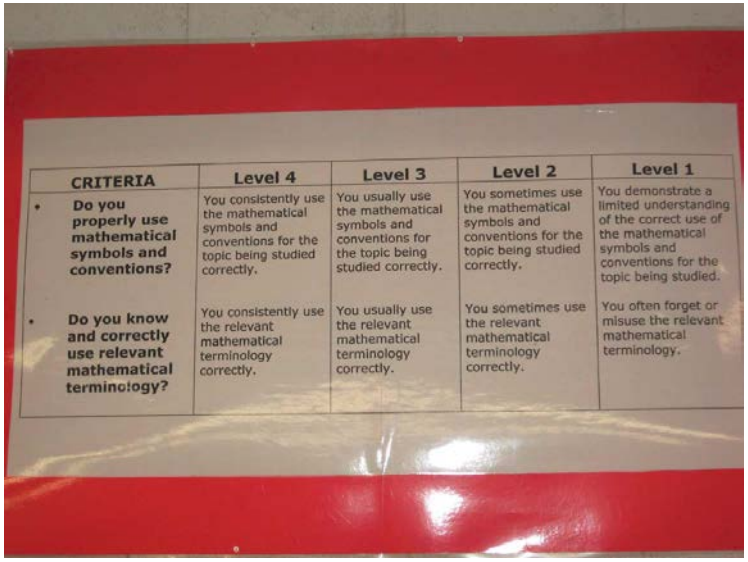




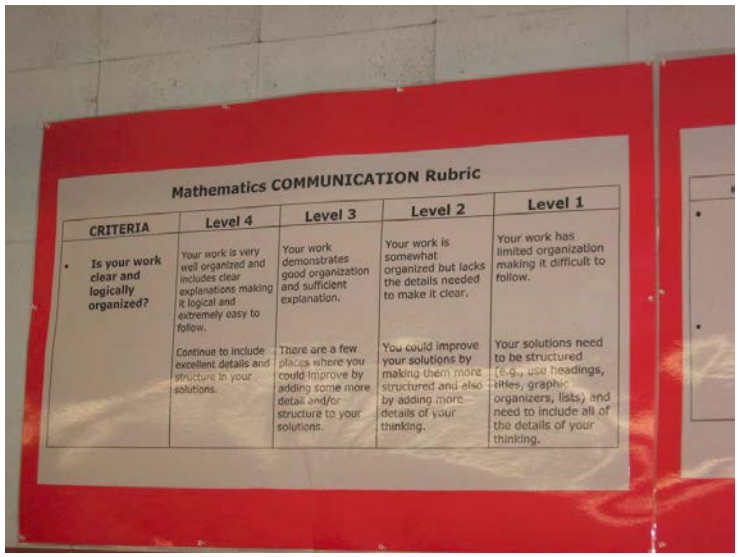
Samples and Illustrations

- Examples of Visual References

- The Department Improvement Plan involved working with students on the Communication portion of the Achievement Chart. Rubrics were posted in each classroom. Students also had a paper copy for their binder.



CRITERIA	Level 4	Level 3	Level 2	Level 1
• Do you properly use mathematical symbols and conventions?	You consistently use the mathematical symbols and conventions for the topic being studied correctly.	You usually use the mathematical symbols and conventions for the topic being studied correctly.	You sometimes use the mathematical symbols and conventions for the topic being studied correctly.	You demonstrate a limited understanding of the correct use of the mathematical symbols and conventions for the topic being studied.
• Do you know and correctly use relevant mathematical terminology?	You consistently use the relevant mathematical terminology correctly.	You usually use the relevant mathematical terminology correctly.	You sometimes use the relevant mathematical terminology correctly.	You often forget or misuse the relevant mathematical terminology.

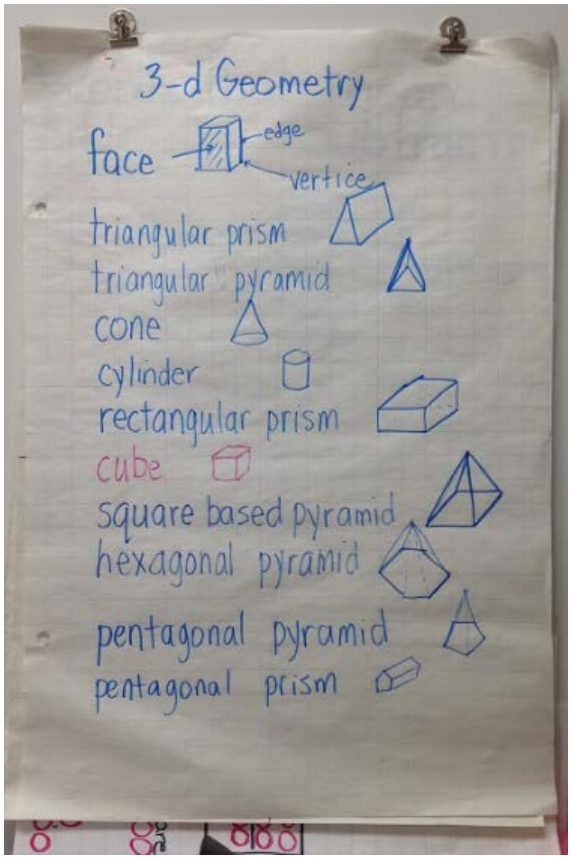


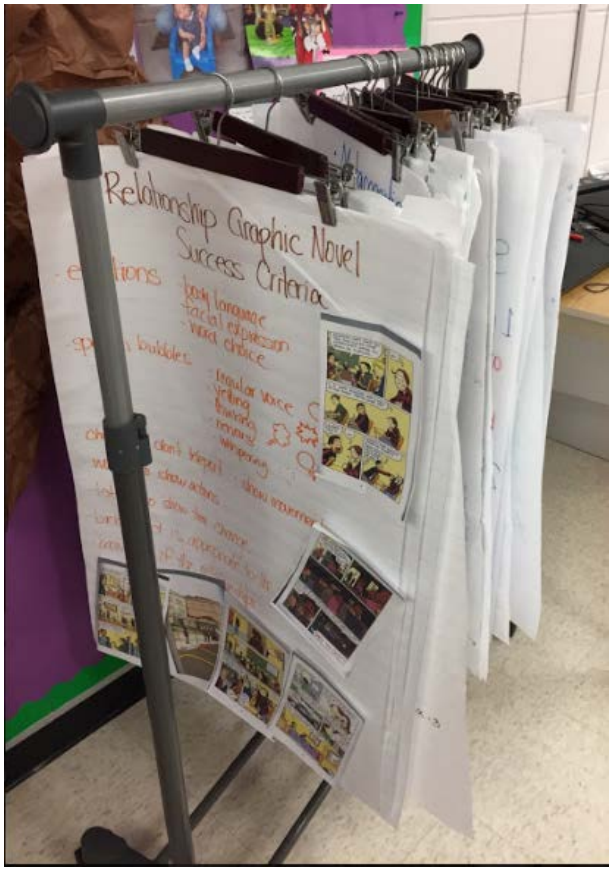
Mathematics COMMUNICATION Rubric

CRITERIA	Level 4	Level 3	Level 2	Level 1
• Is your work clear and logically organized?	Your work is very well organized and includes clear explanations making it logical and extremely easy to follow. Continue to include excellent details and structure in your solutions.	Your work demonstrates good organization and sufficient explanation. There are a few places where you could improve by adding some more detail and/or structure to your solutions.	Your work is somewhat organized but lacks the details needed to make it clear. You could improve your solutions by making them more structured and also by adding more details of your thinking.	Your work has limited organization making it difficult to follow. Your solutions need to be structured (e.g., use headings, titles, graphic organizers, lists) and need to include all of the details of your thinking.

Samples and Illustrations

- Research shows that word walls need to be dynamic and regularly referenced in classrooms. The image on the left shows how a educator displays the vocabulary of the current mathematics unit front and centre on the anchor chart in the classroom for all students to easily access the vocabulary and visual prompts. The educator adds new words as they are referenced in mathematics class.
- In an elementary classroom, a large number of anchor charts may be created in math, as well as other subjects. The image on the right, shows how the educator uses a unique storage solution that allows for quick and easy access for the students.



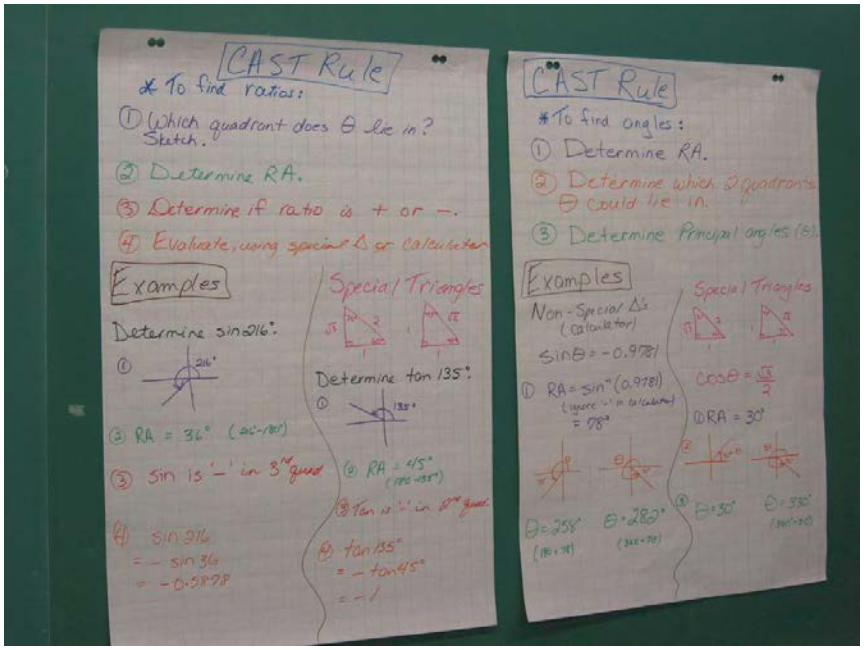


Samples and Illustrations

Do the visual references include student and class generated work produced during the learning activities?

An educator shares:

- As a department, we are working towards building Anchor Charts with students and displaying examples of student work. This is a work in progress.
- Examples of student work are used to create a learning wall.



- Using pre-and post-student opinions and test results, a 2010 pilot project in Hastings Prince Edward DSB measured the effect of adding visual wall materials to a classroom.
  - Conclusions:
    - Displays in a mathematics classroom can enhance students' performance and are encouraged.

Samples and Illustrations

- Word Walls are excellent visual cues to connect with prior learning of terms and math skills.
- Posters and displays must be referenced to or by the teacher during instruction to be effective.
- Updated marks and grades on displays are appreciated by students.
- Math teachers are encouraged to visit other classrooms to gain inspiration for their displays.

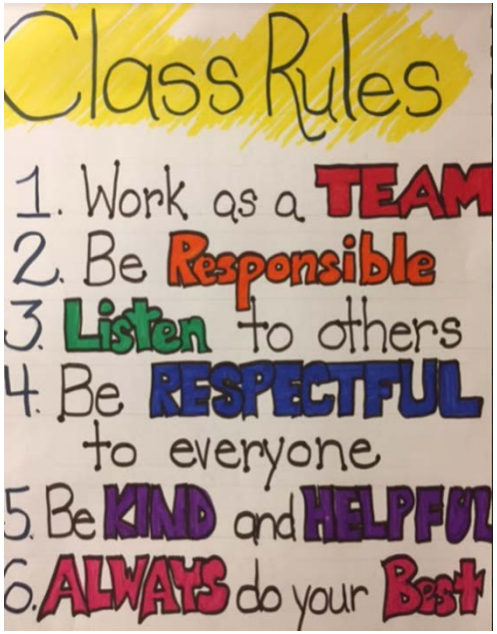
Front of the classroom: Horizontal Number line, Word Walls

Sides of the classroom: Math process and inspirational posters, learning skills and math courses flow chart

Relationships for Learning:

How will protocols for classroom behaviour be developed?

Many classes, such as this one, will spend time at the start of the year working together to determine their classroom rules. Anchor charts, such as these, will be developed and in the case on the left students decorated a hand with their name on it to indicate their agreement with the rules.



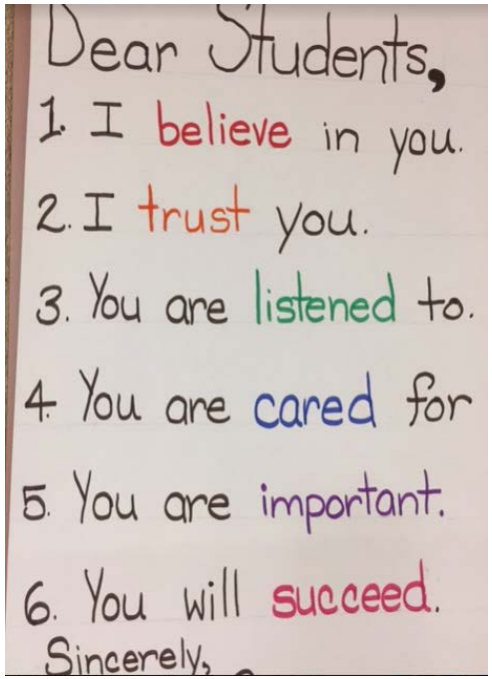
- Learning Together Posters adapted from My Professional Tools (2005) by Kawartha Pine Ridge District School Board

How do I show my students that I respect and value them?

…. *"Each teacher in the school is required to meet the students at the door to the class in order to welcome the students and to control behaviour issues in the hallways. 1. Activities for the day are posted on the board on the schedule. 2. Class rules are developed at the beginning of the year and posted in plain view for all students to see. 3. Student work is posted in the class for a variety of activities. In my class (Math/Science), I use a "Getting to Know You" activity at the beginning of the year to allow the students to tell me a little about themselves. I try to use what I learn from this activity to identify areas of concern, strengths and weaknesses and likes/dislikes."*

From Northwest CDSB Classroom Dynamics Pilot project 2010-11

Hanging in the hall by the door to the classroom, students can easily read this poster every day and know what to expect when they enter the classroom.



Samples and Illustrations

This teacher meets students at the door taking time to touch base with each student, gauging their learning stance for the day and making sure they feel welcome and valued.