

SELF-REGULATION AND SELF-ADVOCACY SKILLS IN A FIFTH GRADE
MATHEMATICS CLASSROOM

by

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Introduction

During my six years as a fifth grade teacher, I have noticed that many students struggle to regulate their emotions and to advocate for help when they need it. Through my own observations, I have seen how these two skills are critical for students as they promote more time on task and more successful interactions with their classmates. When students are lacking one or both of these skills, they struggle to get through the academic day. During math time, in particular, I have witnessed many students lose control of their emotions when they get frustrated by a challenging problem. These students need to advocate for themselves to receive help when they need it or to have the skills to refocus and self-regulate when they lose emotional control. This project intends to answer my research question, *how can social emotional learning strategies around self-regulation and self-advocacy be integrated into mathematics instruction at the fifth-grade level?*

Project overview

There can be a lot of pressure on teachers move through their math curriculum at a moderate pace. Often, it does not feel like there is any extra time in the standard 70-minute daily math block. With this in mind, I wanted to find a way to incorporate social emotional instruction directly into math time. In order to accomplish this, I developed a series of 15 morning meetings. The idea of the morning meeting comes from a program my district uses, Responsive Classroom (RC), for classroom management. As part of the program, students meet in their classrooms at the beginning of each day to greet each other, talk about a morning message, share out, and play a game together (RC, 2018). My project takes this framework and uses the components to

incorporate social emotional skills and mathematics skills that align with the Everyday Mathematics curriculum (University of Chicago, 2015).

Participants and setting

My project is designed for fifth grade mathematics students utilizing the Everyday Mathematics curriculum. However, the series of morning meetings can be easily adjusted to fit any curriculum in an upper elementary grade-level. The series of meetings is designed for math classrooms that meet daily in a 70-minute block. The morning meeting would occur at the start of the first class of the week, each week, for approximately 15 weeks. Since many upper elementary teachers do not start in their official math groups for a couple of weeks, the curriculum is designed to last through the first semester. Each meeting is designed to be completed in approximately 20-30 minutes, but can be adjusted to fit outside that timeframe. At the end of the first semester, teachers can decide how they would like to proceed for the rest of the year. The second semester should prioritize goal check-ins every 5 weeks or so, as well as relationship building among peers and the teacher.

Project Format

The curriculum is designed using the Understanding by Design model (Wiggins & McTighe, 2011). In Stage 1, I have included the essential questions that drive the first semester, as well as the established goals for the unit and desired knowledge and skills for students. Stage 2 of my curriculum outlines the required performance tasks. I have included a pre- and posttest for students to self-assess their own learning. Besides this assessment, a majority of the evidence of learning will be from teacher observation, class participations, and the reflections written in students' journals.

Stage 3 is where the learning activities are laid out. I have organized each morning meeting using a modified template from my school district. This template begins with any related mathematics content, key SEL competencies, and student objectives. Next, I explain the prior learning from either the previous lesson or in general. The lesson format is where I describe the content of the lessons and what both teachers and students will be doing during the morning meeting. Later, I provide the connection to the next lesson and how the meeting ties into the curriculum in general. The assessment portion mainly utilizes formative assessment and describes what the teacher should be looking for. In the last section, there is a list of any necessary teacher preparation for the lesson. It is assumed that teachers will have access to a projector (Smartboard or otherwise) or an easel.

STAGE 1 – DESIRED RESULTS

Unit Title: Self-regulation and Self-advocacy in math

Established Goals (standards):

Solve real-world and mathematical problems requiring addition and subtraction of decimals, fractions and mixed numbers, including those involving measurement, geometry, and data. (MN 5.1.3.4)

Learners will be able to, with minimal adult guidance, manage emotions (e.g., stress, impulses, motivation) in a manner sensitive to self and others.

Learners will be able to work cooperatively and productively in a group to accomplish a set goal.

Learners will be able to identify strategies to persist and maintain motivation when working toward short- and long- term goals.

Learners will be able to identify when and how to offer help to others.

Understandings: *Students will understand that...*

- They are part of a group of learners
- They should ask for help when they are confused
- There are ways to calm down when they feel frustrated
- Goals help students stay focused and motivated

Essential Questions:

- How can I ask for help?
- How do I calm down when I am frustrated?
- How can I solve a problem with others?
- How can I achieve my goals?

Knowledge

Students will know:

- Several strategies to calm their minds and bodies
- Resources for help
- How to solve a problem
- The importance of setting goals

Skills

Students will be able to:

- Ask for help when they need it
- Calm down when their emotions are heightened
- Solve problems with a partner or small group
- Set and achieve goals

STAGE 2 – ASSESSMENT EVIDENCE

Performance Tasks:

- Pre-test
- Post-test

Other Evidence:

- Daily observations of individual, partner, and group work
- Participation in class activities
- Journals

Lesson: 1

Topic: Introduction/ Relationship building

Student Objective: Students will be able to follow the mini-meeting routine.

SEL Competency: Learners will be able to build relationships between diverse groups of people.

Prior Learning: This will be the first meeting in the semester of math class. The math curriculum typically starts in the second or third week of the school year. Students will be familiar with the format from previous years and the first week of school when classrooms are set-up using the Responsive Classroom approach. This first meeting will follow the format closely, while subsequent meetings vary depending on the objective. I would recommend conducting this first meeting after you have set up your math class routines and have begun some of the curriculum.

Lesson Format:

1. Students will gather in a circle
2. Teacher explains: “We are meeting here today to begin a new routine. Every week, we will gather for a mini-meeting. Similar to the morning meeting in our homeroom classes, we will always begin with a greeting. Sometimes we will share, sometimes we will problem-solve, and sometimes we will even play a game. Through these meetings, we are working on making our math classroom a safe and enjoyable environment for everyone.”
3. Greeting: Formal handshake. Teacher begins by turning to one student and saying, “Good morning/afternoon, _____.” This student will turn to their neighbor and pass the greeting along until it comes back to the teacher. Before starting, the teacher will model a strong handshake with eye contact.
4. Sharing: Teacher will say “We are all going to share one thing that we are most proud of learning in math so far. It can be a skill from any grade level. For example, you may be proud of learning how to divide, multiply, or even subtract numbers in the millions. As your classmates share, please listen with your whole body and be ready for your turn. We are going to take 30 seconds now to silently think of our response.” When students seem ready, they will take turns sharing briefly around the circle.
5. Game: “Buzz.” Everyone stands in a circle. The teacher selects a number. For example, 4. Each student takes a turn counting up by 1. However, if they land on a number that contains 4 OR is a multiple of 4, then they say BUZZ instead. If they forget to say BUZZ and say the number, then they are out. The first time playing this game will take awhile. The teacher may stop the game at any point.

Example for 4: 1, 2, 3, BUZZ, 5, 6, 7, BUZZ, 9, 10, 11, BUZZ, 13, BUZZ, 15, BUZZ.

Connection to Next Lesson: Since this lesson was simply an introduction, students will feel comfortable following this format in the next lesson. The next lesson will involve a pretest and students' first goal setting session.

Assessment: Formative. Teacher should be observing what students feel their strengths are and how comfortable they are with the factor game.

Teacher Preparation:

1. No materials are required
2. Teacher should be familiar with the game before the meeting

Lesson: 2

Topic: Goal-setting + pre-test

Student Objective: Students will be able to form a short-term and long-term goal and share it with a partner.

SEL Competency: Learners will be able to assess their level of engagement in their own learning for the achievement of personal goals.

Prior Learning: In the previous lesson, students practiced the format of the mini-meeting and will follow something similar in this meeting. They have also practiced making goals in their homeroom classes through the Responsive Classroom approach (RC, 2018).

Lesson Format:

1. Students gather in a circle.
2. Greeting: High-five and “Happy Monday/Tuesday, _____!” The teacher begins with a neighbor and passes the greeting around the circle.
3. Teacher hands out journals to students (see Appendix B) and explains that they will be using these packets to keep track of their goals this semester. In order to keep them safe, the teacher will collect them at the end of each mini-meeting.
4. Instruct students to write their names on the cover.
5. On the first page, students will set their first goal. They should begin with small, short-term goals, but can also form a long-term one for the semester or year.
6. Teacher should model what this might look like with some examples and non-examples:
 - a. “I want to be able to divide decimals by January.”
 - b. “I want to be able to solve difficult word problems without help by the end of the year.”
 - c. “I want to turn in my homework every day for the next two weeks.”
 - d. “I want to get a 4.0 on my next test.”
 - e. Non-example: “I want to be better at math.” (not specific enough)
 - f. Non-example: “I want to do calculus.” (not attainable/realistic)
7. Students may talk with a neighbor if they need help brainstorming a goal. They may not feel as comfortable doing so alone this early in the year.
8. When students have at least one goal, they should find someone who is not sitting next to them to share their goal with. Remind students that they need to make eye contact and ask someone if they would like to share with them (versus sitting there and waiting for someone to come to them).

9. Finally, as students finish sharing, they should be outlining steps they need to take to reach their goal. This could include asking for help, making a checklist, or involving their parents.

Connection to Next Lesson: For some of the students, the key to reaching their goals will be to have strategies to stay engaged in math class the entire time. The next lesson will focus on introducing the concept of a calm down corner. For students who struggle to self-regulate, this will be a key strategy to help them remain a part of the learning group.

Assessment: The teacher will collect the journals after the mini-meeting to read through student goals. This is a formative assessment and an important opportunity for the teacher to provide feedback to students on the steps they have written for their goals. Are they attainable? Are they missing something?

Teacher Preparation:

1. Make copies of the journal PDF for each student in their class.
2. Have an easel, whiteboard, or smartboard ready to share some examples of goals.
3. Have a plan for collecting the journals and **providing feedback**. A post-it note for each child will suffice. Depending on the number of students, this will take 30-60 minutes of prep time to complete.

Lesson: 3

Topic: Calm Down Corner

Everyday Math Connection: Unit 2: Addition and subtraction of whole numbers and decimals

SEL Competency: Learners will be able to, with minimal adult guidance, manage emotions (e.g., stress, impulses, motivation) in a manner sensitive to self and others.

Student Objective: Students will be able to utilize the Calm Down Corner when they are feeling frustrated.

Prior Learning: Now that students have set goals for themselves, they need to start learning different strategies to help themselves reach them. Since spending all of math time working on math would be the best way to do that, this lesson will use interactive modeling from RC to talk about a calm-down corner. It will also provide students with practice describing their feelings.

Lesson Format:

1. Greeting: Pass a fist bump and say “Good Morning/Afternoon, _____” around the circle.
2. Place a basket with assorted colors of ribbon in the center of the circle. Explain that the unit for the week involves adding and subtracting whole numbers and decimals. Give students 20-30 seconds of silence to process their thoughts about the topic. Call on 2-3 students at a time to approach the basket and select the color that best suits their feelings.
 - a. Examples: Green because you feel confident in the topic, red because you know this topic frustrates you, blue because you do not care about the topic, etc.
3. Sharing: After all students have a ribbon in their hand, ask them to form groups of 4 with their neighbors (doesn't have to be perfectly even) and to share the color they selected and why in one sentence. Teacher should circulate and listen in. Encourage students to place their bodies in a group, including everyone who is near them.
4. Call everyone back together and explain that sometimes you may feel “red” or “orange” and need a strategy to help get you towards a “green” feeling in math class. One way you can do this is by using the “Calm Down Corner.” There are two places in the classroom that are good spots to sit and gather your thoughts (point to two spots that are isolated and away from the action of the classroom). We are going to practice what using these spots might look like. If the students are accustomed to the “Take a Break” chair from RC, the difference will need to be explained. With taking a break, the teacher may direct the student to take a break or the student may direct themselves. However, the Calm Down Corner is purely by student choice. The Calm Down Corner should also include a basket of calming items (stuffed animals, squishy toys, fidgets).

5. Modeling: Teacher models first. Teacher pretends to be working on a difficult problem at their desk. Teacher gets visibly frustrated and pauses, then gets up and walks to one of the designated areas. Teacher models counting to ten, deep breathing, and eventually is able to get up and return to the problem.
 - a. Teacher returns to the circle and asks students what they noticed about the demonstration (can take notes on an easel for the class to see)
 - b. Ask one student to model the process
 - c. Have all students sit at their desks to work on a series of problems (subtraction of decimals up on the board- ex. $36.28-17.9$) and tap one desk at a time for them to quickly cycle through the process
 - d. Provide any needed feedback to students meeting or not meeting expectations
6. Transition into the next learning activity: lesson or individual work time.

Connection to Next Lesson: In the next lesson, students will be practicing what it looks like to ask for help. They will again be using an interactive modeling procedure, and so it should run smoothly after this lesson. The teacher will want to point out that the Calm Down Corner will not work for every scenario, and sometimes you do need help from someone else to get through a difficult problem. The goal of the Calm Down Corner is to increase stamina for frustration, and it is important to use it as a resource for self-calming strategies.

Assessment: Formative. Teacher should continue observing students and make a note of anyone that selected a more anxious color for the upcoming unit, as they may need the most help to get through it.

Teacher Preparation and Materials:

1. Teacher will need: a basket, small pieces of different colored ribbon cut to about a foot long.
2. Calm down corner: teacher will need to decide on 1-2 areas of the classroom that would be good spots to utilize. Consider providing a basket of fidgets at those locations if appropriate for your group.
3. Access to an easel, whiteboard, or Smartboard for class note taking.
4. Document prepared with sample subtraction of decimals problems.

Lesson: 4

Topic: Model: Asking for help

Everyday Math Connection: Unit 2: Multiplication of Decimals

SEL Competencies: Learners will be able to identify strategies to persist and maintain motivation when working toward short- and long- term goals.

Learners will be able to identify when and how to offer help to others.

Student Objective: Students will be able to ask for help from a classmate or teacher effectively.

Prior Learning: Students are familiar with the interactive modeling routine from RC in the previous lesson, and will now use it to observe a couple of scenarios where they may need to ask for help. In their curriculum, students have finished their review of multiplication with whole numbers, and will begin moving to decimals after this lesson.

Lesson Format:

1. Greeting: Match Cards (Responsive Classroom, 2013). Using the cards prepared (see description in the Teacher Preparation section below), each student will take one from the center of the circle, and then move around the room to find their match. Once they have, they should say “Good Morning/Afternoon” to each other and find their seat in the circle again.
2. Teacher explains that they will be working on asking for help in today’s lesson. “Why do we need help sometimes?” *Turn and talk with a partner* After sharing a few answers out, the teacher will explain that two of the most important resources for help during math class are your peers and your teacher.
3. Interactive modeling: The teacher will sit with a math problem (64×3.2) and look confused. After “struggling” for a few seconds, the teacher will ask one of the students for help by saying, “_____, could you help me with this question? I am not sure what to do when there is a decimal.” Since this has not officially been taught, it is possible the student will not know how to help. At this point, the teacher will model raising their hand and seeking help from an adult (kids can use their imagination, as there may not be other adults in the room).
4. Reflection: After modeling, the class should make a list together of what they noticed about the scenario. How did the teacher ask for help? What did they say? What happened when the first person couldn’t help them?
5. Students should transition to their desks with a piece of paper and a pencil.
6. Practice: Put up a problem (82.31×9.2) and have students attempt to solve it at their desks. Anyone who needs help should either ask their neighbor or ask the teacher,

using the skills they just observed. In this exercise, encourage students who have already been helped or are comfortable helping to share their knowledge with neighbors that are still having difficulty.

7. Transition: Whole group or small group lesson on the multiplication of decimals. The practice before this should make the lesson relatively short.

Connection to Next Lesson: With the previous lessons adding some strategies for students to achieve self-regulation and self-advocacy, the next lesson will revisit the goals that they formed three weeks ago to see if they have made any progress or need to adjust them.

Assessment: Formative. The teacher should provide feedback to any students who need help but struggle to ask for it, as well as praising any students who successfully ask for and receive help.

Teacher Preparation:

1. Match cards for the greeting: Using index cards, create a series of simple multiplication sentences with 2 digits times 1 digit (ex. $12 \times 4 = 48$). Write the problem on one card and the solution on another. Create as many cards as needed for your class size. If you have an odd number, then you can participate!
2. Easel/Smartboard/Whiteboard for displaying the problem in the practice portion

Lesson: 5

Topic: Goal-setting check-in

Student Objective: Students will be able to adjust their short term goals and share their progress with the class.

SEL Competency: Learners will be able to identify strategies to persist and maintain motivation when working toward short- and long- term goals.

Prior Learning: In the second week, students wrote their first goals. They should have at least one short term goal, but may also have a long term goal to review. Since the second week, students have moved through different topics in math and have learned a couple of new skills to self-regulate and self-advocate.

Lesson Format:

1. Greeting: The Wave (RC, 2013). Students stand in a circle with their arms extended and palms touching. One student turns to their left and greets their neighbor with “Good Morning/Afternoon, _____” and they raise their hands together in a wave formation. This continues around the circle to mimic the pattern of a wave.
2. Individual Reflection: Teacher should hand back the student journals from week 2. They should work in silence for at least 5 minutes. Students should read through the goal(s) that they set and use the second page to reflect on their progress towards achieving this goal. Have they made any? What steps are still needed to achieve it? Pages 2 and 3 guide them through this thought process.
3. Sharing: Small Groups (assigned). Students will move into their groups with their journals. They should all be sitting knee-to-knee. Each student should take a turn sharing their goal, the progress they have made, any adjustments and their plan to continue to achieve this goal. Some students may need extra support with this, so the teacher should circulate as needed.
 - a. *Remind students that they should be showing respect for their classmates and their classmates’ goals by encouraging them. What is easy for one is not easy for all.
4. Sharing: Whole-group. How should we adjust our goals? Do we need to set new ones? What is your plan moving forward? Each student should briefly share their work from today in a sentence or two.
5. Closing: Teacher will explain that the next check-in is in about a month, but that students should be thinking about and working towards their goals every day. Remind students that both the teacher and their classmates are excellent resources for this.
6. Teacher collects the journals to provide individual feedback.

Connection to Next Lesson: In the next lesson, students will be talking about a Social Thinking (Winner, 2005) concept called “Stuck Thinking/Flexible Thinking.” This concept is important in a group learning environment and can help kids navigate group work in a math situation.

Assessment: Formative. As students work and share together, the teacher should be listening in and making note of who might need a one-on-one check-in during this following weeks. The teacher should be reminding students of their goals periodically throughout the month as they discuss other topics related to self-advocacy and self-regulation. The teacher should also collect the journals to provide feedback to students and possibly direct them towards other resources they may need to reach their goals.

Teacher Preparation:

1. Assign students to groups of 3-4 prior to class with a method to communicate them (smartboard list or diagram).
2. Have the student journals ready to hand back: They will use pages 2 and 3 for the lesson.

Lesson: 6

Topic: Stuck thinking + Problem-solving

Everyday Math Connection: Unit 3: Geometry- Polygons and angle measurements

SEL Competency: Learners will be able to work cooperatively and productively in a group to accomplish a set goal.

Student Objective: Students will be able to work in a small group. Students will understand the relationship between the number of sides of a polygon and the total number of degrees.

Prior Learning: In the previous lessons, students reevaluated their goals and updated their progress. Since some students will have new goals, it is important to provide group-work strategies that can help students spend more time working on math and avoiding conflicts. This lesson may take over the regular 20 minutes scheduled, but includes plenty of math content.

Lesson Format:

1. Greeting: Ball Roll Greeting (The Origins Program, n.d.). One student starts and greets another across the circle by saying, “Good Morning/Afternoon, _____” and rolling the ball to them. That person continues the greeting until all students have been greeted. The last person should greet the first person who originally rolled the ball. It is sometimes helpful to have students make a fist or raise their hand if they haven’t been greeted yet so that the class can keep track.
2. Social Thinking Mini-Lesson on Stuck Thinking (Winner, 2006):
 - a. Say: There are a lot of times in our math class when we will need to work together. Sometimes we will all work alone, sometimes we will work with a partner, and sometimes we will work in a small group. In order to work together, it is important to practice something called “Flexible Thinking.” Flexible Thinking means that what you are thinking can change. Maybe you decide to change your plan, to try a different solution, to try something new, or to compromise with a classmate. When we are not able to think flexibly, we are using Stuck Thinking. This means we do not want to change our plan or to try anything new. When we are working in a group, it could also mean that the fun stops.
 - b. Turn-and-talk: Why would Flexible Thinking be important when working with other students?
 - c. Call on 3 students to share out.
3. Practice: Groups of 3-4 students.
 - a. Work with your group. Each member should draw a triangle and a quadrangle. Using a protractor, group members should find the total number of degrees in each figure and compare their answers. Is there a pattern? If so, what is it?
*They may also draw a pentagon if time allows.
 - b. Wait for groups to get started. Answer 1-2 questions, then announce a “change in plans.” The teacher can no longer answer any questions. Students must rely

only on their group members to solve the problem.

- c. Bonus question: Without drawing or measuring, how many degrees does your group predict would be in a six-sided polygon?
4. Reflect whole-group on struggles and successes: What went well? Did anyone have stuck thinking? What did it feel like to have flexible thinking?

Connection to Next Lesson: In the next lesson, students will learn additional strategies to practice self-control and emotional regulation. Since lessons alternate between individual practice and group practice, students will begin to draw a connection between regulating oneself and participating in a community of learners.

Assessment: Formative. The teacher should observe to see which, if any, students struggle to work cooperatively with their groups.

Teacher Preparation and Materials:

1. Ball for the greeting.
2. Protractors and blank paper for each group.
3. Assign students to groups of 3 or 4.
4. Directions for the group activity written on the board or presented on the Smartboard, including the bonus question.

Lesson: 7

Topic: Emotional Control and Mindful Breathing

SEL Competency: Learners will be able to, with minimal adult guidance, manage emotions (e.g., stress, impulses, motivation) in a manner sensitive to self and others.

Student Objective: Students will be able to use breathing to help them manage their emotions.

Prior Learning: In Lesson 3, students learned about a “Calm Down Corner” and practiced using it to bring their emotions back into the green zone. This lesson is intended to build upon that strategy by adding some techniques that can be utilized quickly. The first technique helps to battle negative self-talk, while the second uses breathing to relax and relieve stress.

Lesson Format:

1. Greeting: Language! (Antonelli, 2012). French: Bonjour, Italian: Ciao, or Spanish: Hola, _____. Each student turns to their neighbor one at a time to pass the greeting around the circle.
2. Teacher displays the problem: $845.2 \div 7$ (division).
3. Teachers asks the class: When you look at this problem, how do you feel? Tense? Excited? Nervous? Full of dread?
4. Teacher: “When a problem makes us feel nervous, it is important to pay attention to how our bodies react.”
5. Share: Turn to your neighbor and talk about a time you felt nervous. How did you feel? What did you notice?
6. Activity: There are lots of ways to calm your mind and body when you feel this way. One of the easiest solutions is focusing on your thoughts and your breathing. We are going to try a couple of different activities together.
7. The first strategy we can use focuses on managing your overwhelming or negative emotions. First, you notice the negative thought or feeling, then you use a power statement to interrupt negativity. The goal is to replace the negativity with positive self-talk and visualization. Lastly, you reinforce the positive mental state with a power statement or pose (Iberlin & Ruyle, 2017).
 - a. With the students: Think of a time when you noticed negative thinking- What did it look like, sound like, and feel like? *Turn and talk with a neighbor*
 - b. One way you can interrupt these types of thoughts is to use a power statement. For example: I can do this, I am powerful, I love a challenge, etc.
 - c. Have students create a couple of their own: *Turn and talk*
 - d. Challenge: With your partner, match your statements with a power move (victory pose, air punch, superman pose, etc.)
 - e. If time allows, have partners share their statements and poses with the class.

8. Say: Sometimes we may not be thinking negative thoughts, but we might be feeling nervous. In this case, focusing on your breathing can help you feel calm. Find a comfortable seat and we are going to use a video to guide us through some breathing exercises.

9. Listen to the “Mindful Breathing” video at stopbreathethink.org

10. If there is time, watch the “Focus” video at mindyeti.com

***Other resource: gonoodle.com

Connection to Next Lesson: The next lesson continues to focus on self-regulation. As students add strategies to their “toolbox,” the goal is to keep introducing new concepts that help frame a growth mindset. Students will learn about the size of a problem and how to recognize when the size of your reactions do not match it.

Assessment: Formative. The teacher should continue to observe students as they learn and practice new strategies to provide feedback as needed.

Teacher Preparation:

1. Write the opening division problem on an easel.
2. Have the video at stopbreathethink.org ready to show. You may also want to preview it.

Lesson: 8

Topic: Size of the problem

Everyday Math Connection: Unit 4: Division- Interpreting the remainder

SEL Competency: Learners will be able to recognize and label a variety of complex emotions in self and others.

Student Objective: Students will be able to recognize when the size of their reactions does not match the size of the problem. Students will be able to identify their negative emotions.

Prior Learning: As students have worked through the previous lessons, they have learned some calming strategies to promote self-regulation and to combat negative thoughts and feelings. However, this lesson address the times when students reactions might be larger than usual to a problem. The intention of the lesson is to give students a common vocabulary that will help them discuss these emotions and compare their reactions to the actual size of the problem.

Lesson Format:

1. Greeting: Toe-to-toe (The Origins Program, n.d.). Students begin standing in a circle. The teacher calls out a series of instructions for finding someone to greet: Toe-to-toe, knee-to-knee, elbow-to-elbow, finger-to-finger, etc. Once a student finds a partner and connects as instructed, they say hello to each other. If there is an odd number of students, the teacher can participate. Students must connect with a different partner each time. There should be about 4-6 rounds.
2. Social thinking mini-lesson on size of the problem (Winner, 2006).
 - a. Say: There are different size problems that we encounter throughout our day. Small problems, medium ones, and large ones. The size of a problem is defined by how long it takes to solve and how many people it takes to solve it. For example, a small problem would be one that you can solve yourself in a short amount of time. A medium problem might require 1-2 adults to help and could take days or even weeks. You may only ever encounter a large problem a few times in your life.
 - b. Say: When you do encounter a problem, it is important to practice “self-talk” in order to decide how you should react and determine what the size of the problem really is.
 - c. Teacher example: Take a small cup of water and knock it over by “accident.” At first, react in an unexpected way (maybe a small yell or a jump up).
 - d. Turn-and-talk: Did my first reaction match the size of the problem?
 - e. Then model self-talk: “Deep breath. I just spilled some water. It is okay, no one is hurt. I can clean it up on my own in just a few seconds. This is a small problem.”
3. Practice with a partner: (Display) Tommy has 156 stickers to give out to his friends. He

has 28 friends he wants to share with. He estimates that he can give each friend 6 stickers. When he starts handing them out, however, he realizes that he doesn't have enough.

- a. What is the size of this problem? How many people are affected by it? How long would it take to solve?
 - b. What would be some "self-talk" of the people involved in this problem? What would be a possible solution?
4. Reflection Question (Student Journal- pages 4 and 5): You are taking a multiplication fact test in order to master your math facts. Your table neighbors are all faster than you. They can see that you are still working at a slower pace.
- a. What is the size of this problem? How many people does it involve? What can you think or do in this scenario?

Connection to Next Lesson: The next lesson circles back to relationship building. As students can spend more time on math and interacting successfully with their peers, they can become a closer community of learners.

Assessment: Formative. This lesson involves a lot of facilitating by the teacher, but they should still be sure to observe students and note how they understanding the size of different problems. If reactions in the class have not matched the size of problems, the teacher could use it as an opportunity to review some of the calming strategies they have learned.

Teacher Preparation:

1. Small cup of water
2. Math problem in a SMART Notebook slide or on an easel
3. Size of the problem visual (see Student Journal)
4. Student Journals for the reflection question

Lesson: 9

Topic: Relationship building

SEL Competency: Learners will be able to effectively communicate clearly, listen well, and cooperate with others to build healthy relationships.

Student Objective: Students will learn to practice gratitude by recognizing some of the bright spots in their math class.

Prior Learning: By this time in the school year, students should feel relatively comfortable with each other. Since this lesson will require some vulnerability, the intention is to take an already safe environment and to make it even closer-knit. This lesson will incorporate silly moments with some more reflective ones.

Lesson Format:

1. Greeting: Copy-cat. In a circle, students will copy a greeting from their neighbor to one side, and then create a new greeting for their neighbor on the other side. For example, if Student A does a dance move and says, “Good morning, ____” to Student B, then Student B will have to copy that dance move back and repeat the greeting. Student B can now come up with a new move or style and greet Student C. This continues around the circle until the greeting arrives back to Student A. It is supposed to be silly, so laughs are encouraged.
2. Share: Gratitude. “Gratitude can impact one’s happiness and overall well-being. You can develop feelings of gratitude, even if you are not feeling particularly grateful. You can be grateful for the little things, and it is important to keep finding new things to be grateful for.” Have students put up a hand with all 5 fingers out (10 if there is time). Have them think to themselves the first 5 things they are grateful for in this math class (could be a friend, an accomplishment, a game they love, etc.). Turn and share 1 or 2 of those with your neighbor (Iberlin & Ruyle, 2017).
 - a. If there is time, have a few of students share something they heard from their partner with the whole group.
3. Game- Number hats (Evans, 2005): 4-5 students wear a “hat” with a number attached to it (56, 143, 121, 333, etc.). They must interview the rest of the students about their number with yes or no questions. They may move around the room asking questions. The first student to correctly guess their number wins. Depending on how long it takes for a winner, there may be time for multiple rounds.

Connection to Next Lesson: In the next lesson, students will be revisiting their goals from Week 5. The math curriculum has become gradually more difficult, so there is a chance that students will want to adjust their goals to some of the more difficult topics ahead. Now that they have built a community of learners, it will be important for them to reflect on themselves and with their peers.

Assessment: Formative. Students have a chance to focus simply on building relationships among themselves, and the teacher can help facilitate that.

Teacher Preparation:

1. Number hats- they can be as simple as a small post-it or as complex as an actual hat with a number card taped to it.

Lesson: 10

Topic: Goal-setting check-in

SEL Competency: Learners will be able to assess their level of engagement in their own learning for the achievement of personal goals.

Student Objective: Students will be able to reflect on their progress to previous goals and make adjustments to them as needed.

Prior Learning: As students have experienced this curriculum, they have continued to build relationships, learn self-regulation strategies, and practice common vocabulary to discuss their emotions. This lesson marks the two thirds point in the semester, so most students may need to write new goals to fit both the curriculum and their own math journey.

Lesson Format:

1. Greeting: 1-minute greeting (Antonelli, 2012). Teacher models a firm handshake greeting with a student and both take turns saying “Good morning/afternoon, _____.” After modeling, the teacher starts the clock and gives students one minute to greet as many of their classmates as they can.
*If it is cold/flu season, students can also use their elbows or a fist bump to greet each other instead.
2. Sharing (5-10 minutes): Teacher shows the groups of 3-4 students and asks students to sit with their group in a circle with their student journals. Students should take 1 minute individually to read through their goals from lesson 5. After they have reminded themselves of their goals, they should begin a discussion with their group members of the following:
 - a. What progress have you made towards your goal, if any?
 - b. What did you do during math time to get closer to achieving your goal?
 - c. If you feel you achieved your goal, how do you know? What evidence do you have?
 - d. What might be a new goal that you could set for the coming weeks?
3. Work time: Using their student journals (pages 6 & 7), students should set a new goal or adjust their current one individually. As a reminder, the upcoming topics in the curriculum are below. These topics are generally some of the more challenging ones of the year and could potentially cause anxiety for students.
 - a. Upcoming topics: fractions, decimals, and percentages.
4. As students finish adjusting their goals or writing new ones, they should hand in their journals to the teacher. Providing a quiet practice activity for students to begin after will allow students to take as much time as they need to reflect on their progress.

Connection to Next Lesson: In the next lesson, students will continue to practice both regulation and advocacy skills. These two skills are essential to their math success and should help students continue to achieve their goals.

Assessment: Formative. This lesson is important because it provides feedback to both students and the teacher. The teacher will collect the journals at the end of the mini-lesson and should read through the entries. It is recommended to leave a comment or two for each student to provide feedback and engage them in the process. Based on the journal entries, the teacher may decide to pull students for mini-conferences or to check in with them on their specific goals as the semester progresses (outside of the morning meeting time).

Teacher Preparation:

1. Timer for the greeting
2. Pre-assigned groups of 3 or 4 students
3. Student journals
4. Visual of the discussion questions (on an easel or smartnotebook)

Lesson: 11

Topic: Mindfulness

SEL Competency: Learners will be able to identify strategies to persist and maintain motivation when working toward short- and long- term goals.

Student Objective: Students will be able to practice mindful breathing and to use simple yoga positions as a way to regain focus.

Prior Learning: In the previous lessons, students have been introduced to mindful breathing and have practiced it through both the Calm Down Corner and some of the other activities. The goal of this lesson is to present another strategy for breathing as well as a way to regain focus during times of stress or worries.

Lesson Format:

1. Greeting: Snowball fight (Antonelli, 2012). Using paper from the recycling bin, cut enough piece for each child to write their name on one. After, they should crumple the piece of paper into a ball. Split the class into two teams and have them stand on opposite sides of the circle. Signal the start, and give students 1 minutes to have a “snowball fight,” tossing the paper back and forth. After the minute, each student should pick up one piece of paper from the floor and greet the student who wrote their name on it.
2. Box breathing: Draw a box shape on the board, sit in a chair, start at the lower left corner tracing with your finger. You inhale for 5 seconds, hold across the top for 5 seconds, exhale down for 5 seconds, hold for 5 seconds, and then repeat. Might need to do 3 seconds if 5 is too difficult. “Focused breathing reduces stress and instills a sense of calm. This is a great exercise to use when you feel stressed or anxious.” (Iberlin & Ruyle, 2017).
3. Focus activity: “Another way to feel calm and focused is to try stretching. We are going to try stretching in three different positions.” (Iberlin & Ruyle, 2017).
 - a. Sunrise: Stand and take 4 deep belly breaths. On the 4th, raise your hands above your head and reach as tall as possible. Hold for 5 seconds.
 - b. Tree: Stand on one foot, imagine that foot is like a tree trunk with roots. Bring the other foot up to rest on the leg just above the knee. Can brings arms up, out, or hold them in for balance like the branches.
 - c. Downward dog: Start out kneeling on all fours, press palms into floor, straighten legs and lift up hips. Relax your neck and keep most of your weight on your legs. Look back through legs for a new perspective.
4. Student Journaling (page 8): Which exercises have you enjoyed the most? What has been helpful to calm down or focus?
May want to leave a list of the exercises thus far on the board to jog students’ memories (see page 8)

Connection to Next Lesson: In the next lessons, students are going to circle back to self-advocacy. With stronger relationships in the class and plenty of calming strategies in their “toolbox,” it should be much more comfortable for students to play together, interacted with each other, and to ask for help when they need it.

Assessment: Formative. The teacher should continue to observe students as they try out the breathing and stretching. Some students may need feedback on how they are utilizing it. The teacher should also collect the journals at the end to get feedback on which strategies have been the most popular. It would be a good idea to write down the most popular ones to create a visual reminder in the classroom. It can be placed near the Calm Down Corner.

Teacher Preparation:

1. Recycled paper from the bin.
2. Drawing of a box (easel or board).
3. List of past activities for regulation and today’s activities for the journal reflection.

Lesson: 12

Topic: Advocacy/Relationship Building

Everyday Math Connection: Unit 5- Fraction and Decimal Review

SEL Competency: Learners will be able to work cooperatively and productively in a group to accomplish a set goal.

Learners will be able to identify when and how to offer help to others.

Student Objective: Students will be able to work together in a group to review both decimals and fractions. Student will ask for help when they need it by raising their hand or asking a groupmate.

Prior Learning: At this point in the curriculum, students have learned many strategies to ask for help and to self-regulate. The next couple of lessons are about putting it all together. This lesson is more math-intensive, and the second game may require some help from peers and the teacher. The teacher should be sure to save this lesson for after students have learned and reviewed fractions and decimals. The goal is that students ask for help when they need it.

Lesson Format:

1. Greeting: Circle rewind (The Origins Program, n.d.). Using a small ball or plush toy, a greeting is tossed across the circle until everyone has been greeted. Students may want to sit once they have been greeted in order to keep track. When the last person receives the ball, the challenge is “rewind” the greeting and to have students toss the ball back in the reverse order of how they received it (A-B-C-C-B-A). Students should stand up once they have tossed the ball on to indicate that they have gone. In the end, everyone should be standing in the circle, just as they began.
2. Game 1: “Decimal Aim” (Evans, 2005): One copy of the gameboard/student (see below). Before selecting 4 cards individually, each group (2-3 students) must decide on a whole number to aim for. After selecting the cards, they should fill in the the 3 that are closest to the whole number. Closest wins a point for the round! (For example, the group may agree on 4. If Student A selects a 6, 3, 7, and 1, they would choose to play “3.76” to get closest to 4).
 - a. Students may play this game for 5-10 minutes, depending on time. Use a timer.
3. Game 2: “Fraction War” (Evans, 2005): Need one set of fraction cards. Each students selects a card from the pile. Highest fraction wins. For example: $\frac{3}{8}$ and $\frac{2}{4}$. $\frac{2}{4}$ wins because it is equivalent to $\frac{4}{8}$.
 - a. Students may play this game for 5-10 minutes, depending on time.
 - b. If you do not have enough decks of cards, half the class can start with one game while the second half starts with the other.
4. Circle up- Class discussion: How did your group play together? Did anyone need help? If so, how did they receive it?

Connection to Next Lesson: While this lesson focused on small group work, the next lesson will include one whole-group activity and one individual activity. This allows students to practice self-regulation and self-advocacy in a variety of situations successfully.

Assessment: Formative. The teacher should circulate while students work together to provide help or feedback as needed.

Teacher Preparation:

1. Small ball or plush toy for greeting.
2. Copies of the “Decimal Aim” gameboard: 3 boxes the size of a card, with a decimal point after the first box.
3. A set of whole number cards and a set of fraction cards for each small group.
4. Timer.

Lesson: 13

Topic: Self-regulation

SEL Competency: Learners will be able to, with adult guidance, use organizational skills and strategies to focus attention in order to work toward personal and academic goals.

Student Objective: Students will be able to practice self-regulation while completing a whole group and individual activity.

Prior Learning: Students have learned several regulation strategies at this point. This activity is designed to challenge students to work through a problem that is difficult. Students that struggle may need to put some of their self-regulation and self-advocacy strategies to work.

Lesson Format:

1. Greeting: Skip greeting (The Origins Program, n.d.). The student who is chosen to begin will announce how many students will be skipped for the greeting. For example “skip 4:” the student will then get up, count 4 students, and greet the fifth one. After the greeting, the student will take their classmate’s spot and that classmate would skip 4 and continue the greeting. This would go on until every student has been greeting. (*The teacher may want to provide a skip option based on the number of students who are present so that the same people do not continue to be greeted).
2. Whole-group warm-up: Mindful walking- Calmly ask students to stand up and start walking around the room, noticing every step they take. As they walk, provide cues such as calmly, gently, carefully, thoughtfully, kindly. Then ask them to take a step, pause, take another step, and freeze. Repeat. Remind them they are leaving footprints of kindness wherever they go and return to their seats (Iberlin & Ruyle, 2017).
3. Individual Game: Sudoku. Explain the directions to students and solve the first few numbers “thinking aloud” to show some different strategies. An example gameboard is provided in the student journal on page 9. This is an individual activity. Students can work for 5-10 minutes or more, depending on the class schedule and engagement.
4. Reflection whole-group discussion: How did you feel while completing the Sudoku puzzle? Why? Would you want to try another puzzle in the future? Why or why not?

Connection to Next Lesson: In the next lesson, students are working in small groups to solve a problem. This lesson gave students whole-group and individual activities to practice self-regulation and self-advocacy, while the following activity is meant to provide a small-group practice opportunity. The next lesson is the final activity before the last goal-setting reflection of the semester.

Assessment: Formative. Sudoku puzzles can often be frustrating when you first begin completing them. The teacher should carefully observe students as they work independently to see if they are practicing self-regulation strategies and remind students of their options if they become visibly frustrated. Student should be asking each other or the teacher for help when

they need it.

Teacher Preparation:

1. Sudoku game board copies for each student. There are many available online, but one is provided in the student journal.

Lesson: 14

Topic: Group problem-solve

SEL Competency: Learners will be able to identify when and how to offer help to others.

Student Objective: Students will be able to work with classmates to solve the same problem through communication and self-regulation.

Prior Learning: Previously, students have spent the semester learning different strategies to stay regulated and to ask for help. They have also been introduced to the idea of “flexible thinking” and will need it in order to work through any conflicts that come up.

Lesson Format:

1. Greeting: “A little known fact.” (The Origins Program, n.d.). Students will take turns as they say, “Good morning/afternoon. My name is _____ and a little known fact about me is _____.” The group responds, “Good morning/afternoon, _____” and the next student shares. Model the greeting, and give students 30 seconds to think of a fact that few people know. They may need some prompting such as hobbies, hidden talents, or family.
2. Small group problem-solving: Teacher will display the problem below when students are seated with their groups and have scratch paper and pencils. It is important to remind students of the expectations, such as sitting knee-to-knee or elbow-to-elbow so that everyone has their body in the group. Students may also benefit from a reminder about flexible thinking and how they will need to hear everyone’s thoughts before deciding on a solution.
3. Word problem (data analysis): *Louisa needs to decide how much time to allow to get to school in the morning. She wrote down the number of minutes it took her to get to school for 7 school days below:*
7 20 22 16 20 18 20
Should Louisa use the mean, median, mode, range, maximum, or minimum of this data set to determine when she leaves for school? For the statistic that you choose, explain why this is the best choice and determine how many minutes she should leave to get to school every day.
4. Reflection (student journal page 10): Students will fill out a journal entry after they solve the problem in order to reflect on how their group worked together and how they contributed to the group themselves. The teacher should collect these journals when they are finished.

Connection to Next Lesson: This lesson was intended to provide students an opportunity to be successful in group work together. Students should start to see the connection between regulating themselves and contributing to the learning environment for their classmates. In the next lesson, students will be reflecting on their entire semester together in this math class. They will be thinking about and analyzing their progress towards their own goals, as well as

taking a post-test to determine if they feel stronger about their ability to self-regulate and self-advocate.

Assessment: Formative. During the lesson, the teacher should be circulating and checking in with groups to see how they are coming along. After collecting the journals, the teacher should review the entries from this lesson to see how students worked in their groups. It may be necessary to provide feedback based on what the entries say.

Teacher Preparation:

1. Assign students to groups of 3 or 4 students.
2. Word problem displayed on the board.
3. Scratch paper for group work.
4. Student journals for the reflection.

Lesson: 15

Topic: Semester Reflection + Post-Test

SEL Competency: Learners will be able to assess their level of engagement in their own learning for the achievement of personal goals.

Student Objective: Students will reflect on their semester in math and complete a self-assessment of their progress towards self-regulation and self-advocacy.

Prior Learning: In this unit, students have had many opportunities to build relationships with their classmates and their teacher. They have practiced asking for help, calming down in frustrating scenarios, and working successfully with their peers. This final lesson is about wrapping up the semester and reflecting on all of their work together and individually.

Lesson Format:

1. Greeting: Compliment greeting (The Origins Program, n.d.). Each child greets their neighbor with a “Good morning/afternoon, _____” and a compliment. The teacher should first model a compliment and remind students that the compliments should be based on what a child does, not what they are wearing or what they look like. For example, “Good morning, Tommy. You are always willing to help a classmate when they need it.”
2. Independently: Pass students journals out and ask students to take 5 minutes to read through their previous entries. On the final page, students should independently reflect on their goals and their entire semester. How have their goals changed? Have they met any goals? What are their goals for the next semester?
3. Once students have completed their final entry (page 11), they should turn in their journals and begin the post-test. This test is the exact same as their pre-test. When finished, they should hand in their assessment and begin the next math activity.

Connection to Next Lesson: This is the final lesson of the unit. If the teacher chooses to continue this routine in the second semester, the information gained from this lesson can help determine the areas of growth needed for students. They may also continue this mini-meetings as a way to continue building strong relationships in the classroom.

Assessment: Summative. The teacher should use the student journal and the post-test as ways to assess students’ progress towards self-regulation and self-advocacy. It will be important for the teacher to compare the answers on the posttest with those on the pre-test and possibly share those results with their students. Depending on the results, the teacher will know what some areas of growth may be for the second semester and can plan mini-lessons accordingly.

Teacher Preparation:

1. Copies of the post-test for all students
2. Student journals for their final entry

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APPENDIX A
Pretest and Posttest

Name: _____ Homeroom Teacher: _____

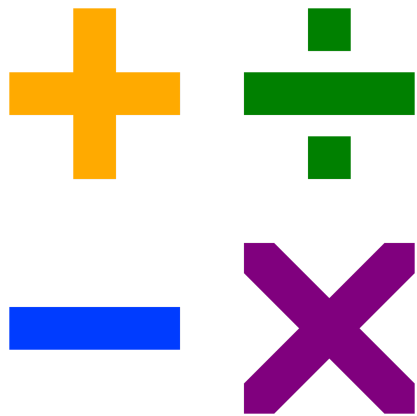
Social Emotional Math Inventory

	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
I can stay focused on a problem even if there are distractions.	1	2	3	4	5
I remain calm when someone is bothering me.	1	2	3	4	5
I know how to calm down when I am feeling frustrated.	1	2	3	4	5
It is easy for me to control my emotions.	1	2	3	4	5
I am comfortable asking for help from <u>classmates</u> when I feel confused.	1	2	3	4	5
I am comfortable asking for help from my <u>teacher</u> when I feel confused.	1	2	3	4	5
I get along well with my classmates even when we disagree.	1	2	3	4	5
I can usually describe how I am feeling.	1	2	3	4	5
I know when I need help solving a problem.	1	2	3	4	5
I know I can solve a problem even if it looks difficult.	1	2	3	4	5
I know how to form a goal and plan steps to achieve it.	1	2	3	4	5

(Panorama Education, 2015)



5TH GRADE



**MATH
JOURNAL**

My Math Goals:

1. _____

2. _____

Steps to complete my goal:

1. _____

2. _____

3. _____

4. _____

5. _____

Steps completed towards my goals as of _____ :

Steps left to complete my goals:

Changes needed to my current goals:

New Goals:

Steps to achieve them:

1.

2.

3.

4.

SIZE OF THE PROBLEM:

Glitch



affects just you and takes seconds to move on

Small



affects 1-4 people and takes minutes to solve

Medium



affects an entire group or class and takes days to solve

Large



affects a large group or even the entire school and takes days or weeks to solve

Catastrophe



affects cities or even countries and takes months or years to solve

Reflection Question:

You are taking a multiplication fact test in order to master your math facts. Your table neighbors are all faster than you. They can see that you are still working at a slower pace.

1. What is the size of this problem?

2. How many people does it involve?

3. What can you think or do in this scenario?

Completed goals as of _____ :

Evidence of completing my goals:

Changes needed to my current goals:

New Goals:

Steps to achieve them:

1.

2.

3.

4.

Reflection Question:

Which focus strategy have you enjoyed practicing the most? Why?

So far we have learned:

- Calm Down Corner
- Flexible thinking
- Power statements & power moves
- Mindful breathing
- Focus strategies through videos
- Size of the problem
- Gratitude
- Box breathing
- Stretching (tree, sunrise, downward dog)

SUDOKU:

5	3			7				
6			1	9	5			
	9	8					6	
8				6				3
4			8		3			1
7				2				6
	6					2	8	
			4	1	9			5
				8			7	9

Each row, column, and box must contain the digits 1-9.
Digits cannot repeat within each row, column, or box.

Reflection Question:

How did your group work together on the problem? Why?

How did you contribute to your group's success?

What would you change for next time?

Final Reflection Questions:

How have your goals changed through the semester?

Have you met any goals? How do you know?

What are your goals for the next semester?
