

# COYOTE WILLOW FAMILY SCHOOL

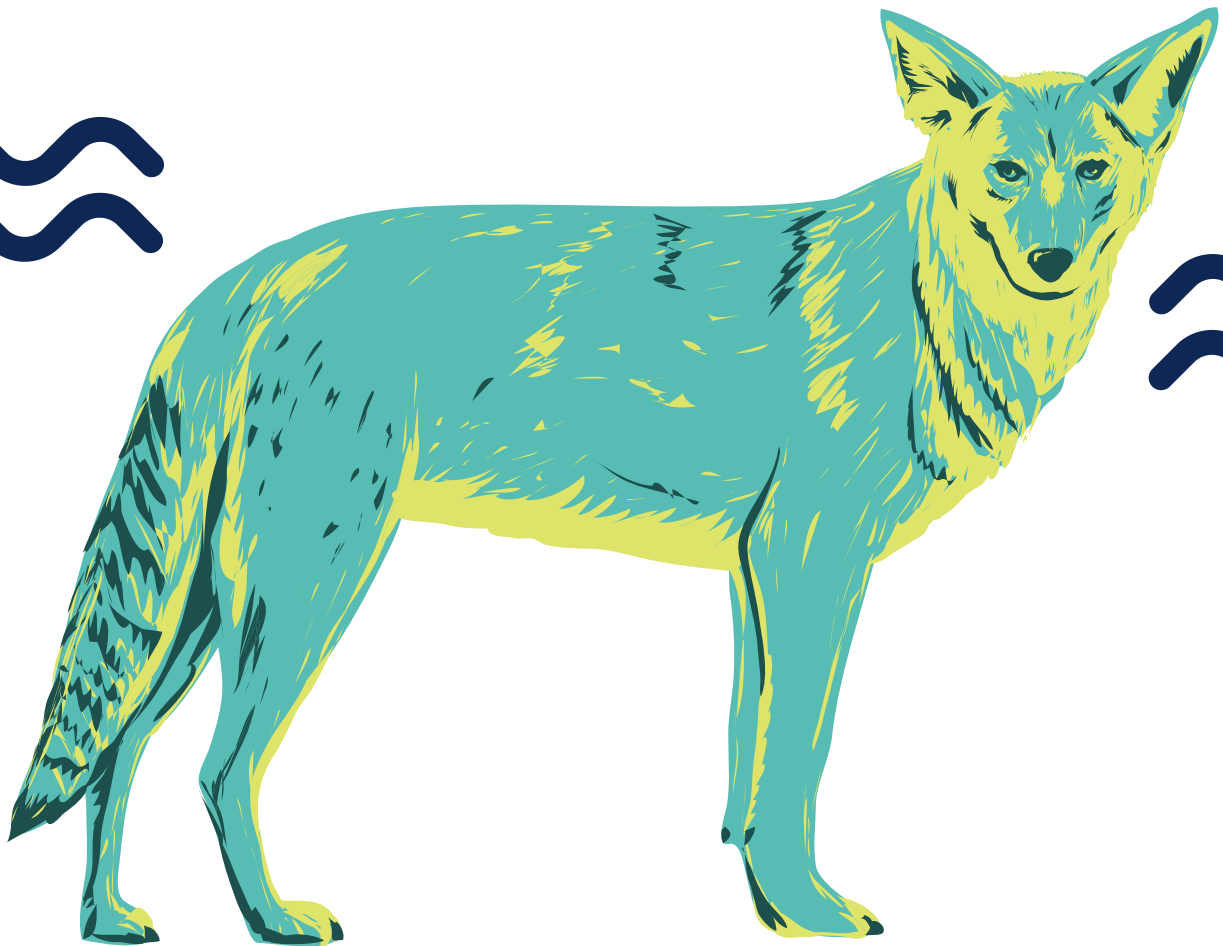
AN APS MAGNET SCHOOL, GRADES K-8

Attitude. Attention. Commitment.

# FAMILY

# CURRICULUM

# TOOLKIT



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# WELCOME TO FAMILY SCHOOL!



Attitude. Attention. Commitment.

## **Welcome to our family!**

Here in Family School, we believe in building a partnership between parents, students, and educators to grow students into self-initiating, life-long learners. Our curriculum is rigorous, hands-on, integrated, and engages self-directed, cooperative learning.

We believe that active, intellectual engagement of teachers, parents, students, and the community is beneficial to all. Our rigorous curriculum must work in conjunction with the individual students' learning process to create the greatest level of understanding of the world. Student evaluation is an ongoing process that focuses on all aspects of learners. The ability to change and grow is fundamental.

## **Our students:**

- Learn to work cooperatively as both leaders and co-learners, at home and in school
- Work with different ages in multi-age classrooms
- Develop into “interdependent” learners, knowing when to work independently and when to call on diverse academic resources, including school teachers and home teachers



# HISTORY

More than 30 years ago, in the basement of Monte Vista Elementary School, one teacher and six families launched an innovative educational program that has evolved into what we know today as the “Family Schools”. The founder of Family School’s vision of integrative learning--in which teachers, students, and parents participate equally in the learning process--has grown and found a home in our current, state-of-the-art, eco-friendly facilities.



Today, Family School’s unique combination of classroom and home-based instruction provides both a curriculum and an educational philosophy to parents who want to actively engage in their child’s education.

Family School’s curriculum is research- and standards- based, with a core emphasis on critical thinking and problem solving. Over the last three decades, our curriculum has grown and responded to educational research, community needs, and the expertise of the educators that develop and evolve it.

# THE FAMILY SCHOOL ASPIRATIONS



In Family School, we aspire to teach toward the following ten aspirations, each of which is core to our philosophies.

1. Students **making meaning**
2. Students developing habitual **critical thinking**
3. Students experiencing “**self as**” **moments**, where they connect authentically with real world content
4. **Students’ potential** rather than limitations
5. Students improving their **understanding of their own learning**
6. Students improving their ability to **teach each other**
7. Creating those moments when students can **make leaps** in their learning
8. Either mastery of, or exposure to, **challenging and student-directed curriculum**
9. **Teachers deepening their understanding** of the concepts they teach
10. Students and teachers engaging together in a **learning community**

**As we develop learning experiences and curriculum, we ask ourselves, “Does this meet the Aspirations?” “Can I see the Aspirations in everything we do?”**

# SUPPORT



Required monthly classes led by your classroom teacher, to review curriculum and instructional practices

## Monthly Parent Meetings

## Parent Academy Math Classes

From Kinder through 8th grade math, classes on how to use our curriculum to build conceptual understanding in math

Led by the entire staff, this evening provides a rotation of classes on curriculum and educational pedagogy

## Curriculum Night

## Coffee & Curriculum

Monthly teacher-led curriculum classes

A website containing videos of math classes and parent handbooks for the Math Group curriculum

## Math Resource Website



## The FTO

The Family Teacher Organization provides monthly meetings and ample events and resources to support curriculum and community engagement at <http://coyotewillowfto.org/>



# HOMESCHOOLING 101

For families engaging in partial-homeschooling, we recommend developing practices and structures at home that mimic those seen in the classroom environment.

- Create a visual schedule that includes breaks for snacks and movement
- Establish a homeschooling space in your home that is not used for play or other activities
- Review goals and expectations for homeschooling time
- Wear a hat or a scarf (or any other garment) that helps your child distinguish homeschooling instructor from parent/guardian
- Look carefully through student agendas and folders daily
- Keep track of homeschooling time in your log
- Use the manipulatives and instruction methods used in the classroom environment
- Stay in regular contact with your teacher for questions

# THE PARENT SUPPORT CONTINUUM



At different points in their educational journeys, our students exist at different points on this continuum within our work with them. They may be in different places on the continuum depending on the mode, and may move up and down year to year, or even day-to-day. This continuum exists to help parents identify where students need support and what that support looks like as we encourage independence in our students.

## PARENT SUPPORT CONTINUUM



## STUDENT RESPONSE TO PARENT CONTINUUM

Parent finds educational opportunities for students, or supports ones that student has found.

Parent checks student management, provides resources, offers extension assistance

Student requests for parent support when it is needed in the assignment.

Parent checks-in at random points in the assignment.

Parent does a portion of the assignment while the student is doing the same portion, seated next to parent. Parent uses external speech while doing their portion so student can hear decisions and thinking process of parent.

Parent provides guidance for some of the sections of an assignment that they believe need support.

Parent provides direction for each section of an assignment.

Parent demonstrates the lesson objectives and student emulates the demonstration.

Parent takes control of student getting the work done.

Parent takes control of student's work and completes the work for the student.

**Parent relinquishes educational responsibility to learner**

**Parental support of independent learners**

**Parent request Step-in**

**Parent random Step-in**

**Parent /Learner side-by-side support**

**Parent shares portions**

**Parent guides**

**Parent models/ Learner emulates**

**Parental support dependent learners**

**Parent disables student learning**

Student is self-motivated to want to find new learning opportunities, may be extensions or new venues.

Student sets up their homeschooling work and manages the workload in an efficient manner and is eager to have support to extend their learning if offered.

Student requests parent for assistance when needed and responds positively to parent support.

Student shares work and restates what they have done when parent does a random check-in point.

Student is responsive to parent external talk about the process and thinking of the work. Student is able to articulate what they might have not been thinking before the side-by-side.

Student can suggest sections on which they need help, but are also open to parent choice of a section that parent thinks is important to support.

Student needs guidance throughout the assignment and is open to suggestions and corrective feedback.

Student is unclear about how to do the assignment and needs modeling to understand the steps and why the steps are needed.

Student is unclear of what the assignment is and may also be unaware that there is an assignment, so parent walks the student through the work.

Student is not in control of their learning and may not even be able to distinguish that a learning opportunity requires their attention.

# OUR CURRICULUM



Our school uses a curriculum that is like no other school. We emphasize academic rigor, critical thinking, conceptual knowledge, and problem solving.

Students interact with two types of curriculum, which we call modes. Modes are broken into two classifications: mastery modes, which are tested, and exposure modes, which are not assessed in a traditional sense.

In most cases, mastery modes require an 85% to consider proficient. We believe in ensuring students have made meaning before progressing them ahead.

Exposure modes serve a different purpose entirely. They provide students an opportunity to engage collaboratively on content, working on critical thinking skills, creative problem-solving, teamwork, risk-taking, and communication.

These two classifications of curriculum work together to create a balanced, challenging educational experience.



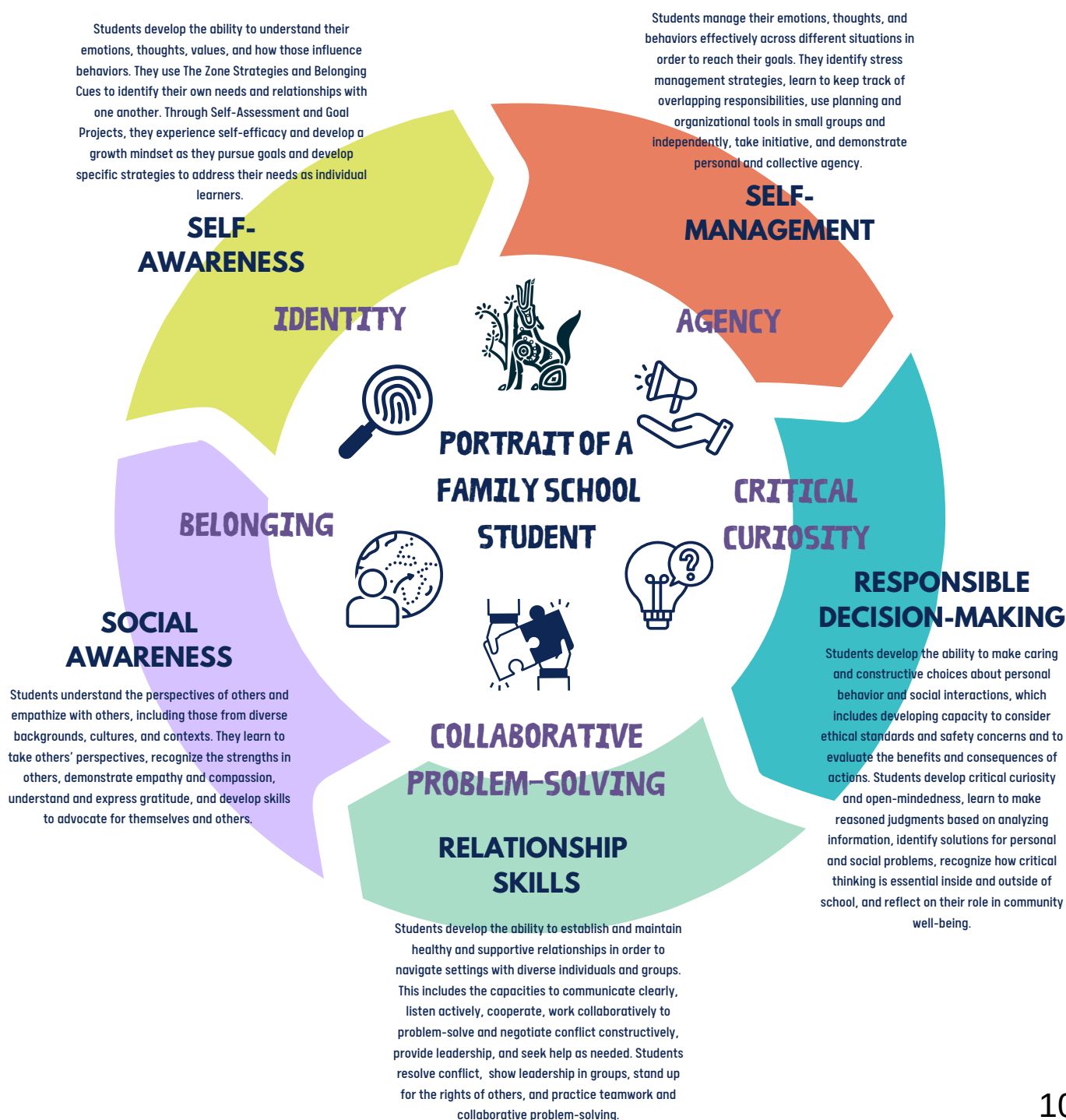
# SOCIAL-EMOTIONAL LEARNING



Adapted from the CASEL Framework: Collaborative for Academic Social, and Emotional Learning.

In our classrooms, social and emotional competence is enhanced through the explicit instruction of social and emotional skills and attitudes, which are taught and practiced in developmentally, contextually, and culturally responsive ways. We engage with cooperative-learning and project-based learning, where students develop the skills they need to be responsive, engaged, and empathetic interdependent learners in a diverse world. In our learning communities, students, parents, and teachers partner in the educational process, and students learn to elevate their own agency and build strong relationships with their adult and peer learning partners, fostering student and adult growth, and generating collaborative solutions to shared concerns.

Our foundational approach to Social-Emotional development is through **the Belonging Cues, the Curriculum in Action Qualities, the Zone Strategies, Self-Assessment and Goal Projects, the Critical Reframers, and all of our collaborative learning modes, including Workshop, NRG, Brainteasers, Math Groups, and Reading Groups.**





# SOCIAL-EMOTIONAL LEARNING



Adapted from the CASEL Framework: Collaborative for Academic Social, and Emotional Learning.

Family School exists as an extension of the community and family, wherein our students are given the skills to see themselves as members of first a home community, then a learning community, and eventually a global family. We bring community engagement and real-world experiences into curriculum and events, develop Leadership and Service experiences for students, and integrate the community and the world into our curriculum and instruction.

Families and teachers form authentic partnerships and connections to enhance and reinforce every students' social and emotional development. We partner in instructional practices to reinforce Family School pedagogy and curriculum year-to-year. Families are integral in our projects, events, assessments, and the daily organization of classroom structures through volunteerism, extended learning activities, and coordinated services.

Our School integrates social and emotional learning in all classrooms and settings in ongoing planning, implementation, evaluation, and continuous improvement of instructional practices which uphold our Aspirations. Families and teachers engage in collaborative learning experiences, monthly organic and responsive trainings, and constant communication to benefit each students' unique social, emotional, and academic needs.

Our classrooms enhance social and emotional competence through explicit instruction in social and emotional skills, cooperative learning, problem and project-based learning, and the integration of SEL strategies throughout all curriculum. Teachers, parents, and students partner in the learning community. Family School classrooms teach explicit strategies and collect data around the use of The Zone, Belonging Cues, CIA Qualities, and Critical Reframers. Students engage in a wide variety of grouping structures. They engage in yearly Goal Projects and Self-Assessments to reflect actively on their own learning and needs, and to develop a growth mindset.



# THE FAMILY SCHOOL



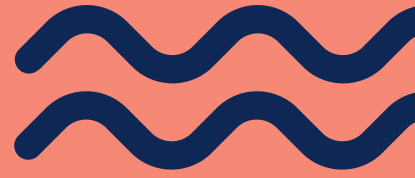
## STRATEGIES

Above and beyond content and the standards, we believe that one of the most important things we can teach our students is how to *be self-advocating learners*. Our integration of curriculum around the purposeful externalization of strategies is an inherent feature of approach to Social-Emotional Learning and student self-advocacy. In order to create social, collaborative, *and inter-dependent learners*, we emphasize the direct instruction of a variety of student strategies.

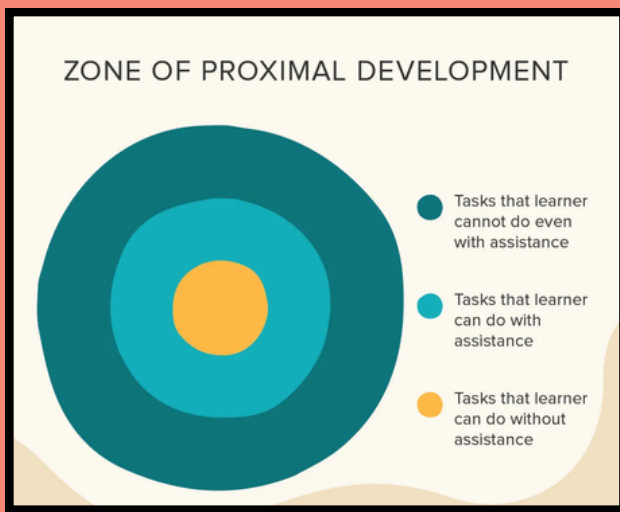
Embedded in all of our learning modes are Family School strategies and tools that are fundamental to our culture as a community. They are essential to ALL of our curricula, and inextricably woven in our practices, both in school and at home. They represent a shared language that moves between home and school, and which students take with them into their futures.

Some of our strategy sets lend themselves to all modes; others are inherent in particular ones. Throughout this handbook, you will see references to how Family School strategies are integrated within particular curriculum. All of our strategies represent Family School's intentional instruction aligned to social-emotional learning and the CASEL Framework.

# THE ENGAGEMENT ZONE HISTORY

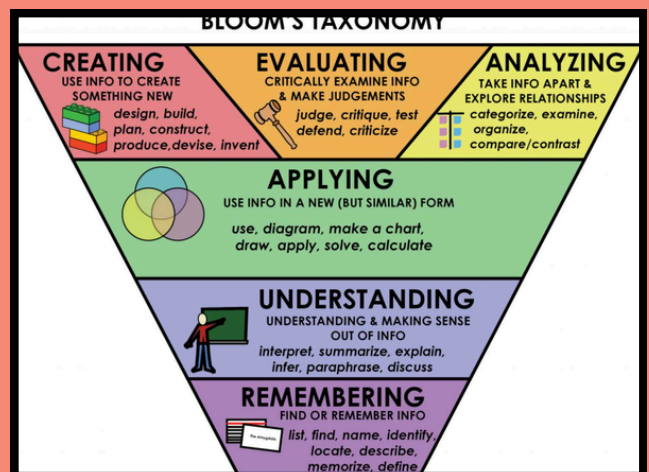


Born out of two educational philosophies, Vygotsky's "Zone of Proximal Development," and Bloom's "Taxonomy of Questioning," Family School has created its own unique *curriculum* for helping students advocate for their learning needs.



**The Goal of The Zone Strategies is to help students widen the orbit of what they are capable of engaging with, rather than assuming that their zone is “fixed” or predetermined.**

Additionally, our unique Zone Strategy trajectory enables students to progress toward higher order thinking and questioning over time, in many ways as a reflection of Bloom's Taxonomy seen here.



**The Zone Strategies are founded in educational science, but are uniquely our own. They require fidelity from both teachers and students, and function in homeschooling as well as in the classroom.**



# THE ZONE

## STRATEGIES



### **Pre-Game Strategies (for our newest students)**

Materials Ready  
Quiet Coyotes  
Listening Ears  
Body Ready  
Over the Edge!

### **Zone Level 1**

Restate  
Table Talk  
Over-the-Edge  
Sample Problem  
Specific Question  
Build on Prior Knowledge (PK)  
Question Feedback

### **Zone Level 2**

How does it fit?  
How does it connect?  
What if?  
Why/why not?  
Another way?  
Faster way?  
Backward?  
Board Talk  
Abstracting Feedback

### **Zone Level 3**

Explain  
Apply to Real World  
Make Quiz Problems  
Explore theoretical  
Explain implications  
Hypothesize why  
Alternate Analysis  
Research Further  
Provide Feedback

**Zone Strategies should be reviewed with  
teachers and in parent meetings to practice  
how they are used in correct contexts.**



# THE CRITICAL REFRAMERS



The Critical Reframers are used throughout all subjects and grade levels at Family School. The Reframers represent a framework from which students approach problem solving and teachers approach instruction. They provide a common vocabulary for critical thinking and are used throughout the school by teachers, parents, and students. As students or groups develop an area of study, they are required to look at their assignment from different perspectives by “reframing” the questions, strategies, or issues associated with any area of study.

Reframers appear across all curriculum in Family School. It can be helpful to learn them gradually. This may include regularly practicing and reviewing them, writing reframed questions, seeking them when you read, creating illustrations or diagrams for them, and practicing “reframing” content through them. Every brain is unique and will gravitate toward certain reframers. It is important to practice the ones that feel less “comfortable,” too.

# CRITICAL REFRAMERS



## Comparing

Identifying and stating similarities and differences between things.



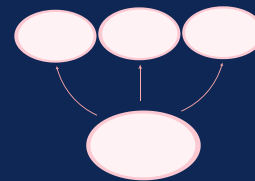
## Classifying

Grouping things into definable categories on the basis of their attributes.



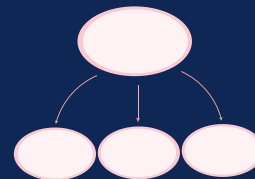
## Inducing

Creating generalizations from observation or analysis. *Detail to general.*



## Deducing

Predicting details or conditions that would lead to general principles. *General to detail.*



## Constructing Support

Building a system of proof for a claim.



## Abstracting

Identifying and stating the underlying theme or general pattern of information.



## Perspective Analysis

Identifying and stating how perspectives affect understanding of information.



## Error Analysis

Identifying and stating how errors affect understanding of information or results.

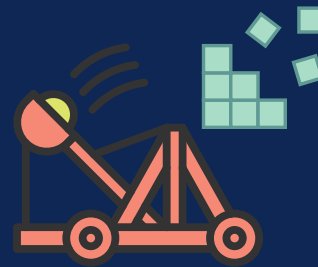


# CRITICAL REFRAMERS



## Means/End

Identifying and stating how methods/procedures affect the result.



## Form/Function

Identifying and stating how structure influences purpose and how purpose/operation informs the structure.



## Utility

Identifying and stating the usefulness.



## Sequencing

Identifying and stating order and the implications of order.



## Prioritizing

Identifying, arranging, and stating order based on importance.



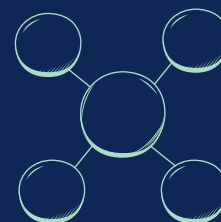
## Parameters

Considering effects of changing the limits, boundaries, or perspectives.



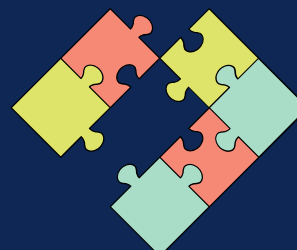
## Defining

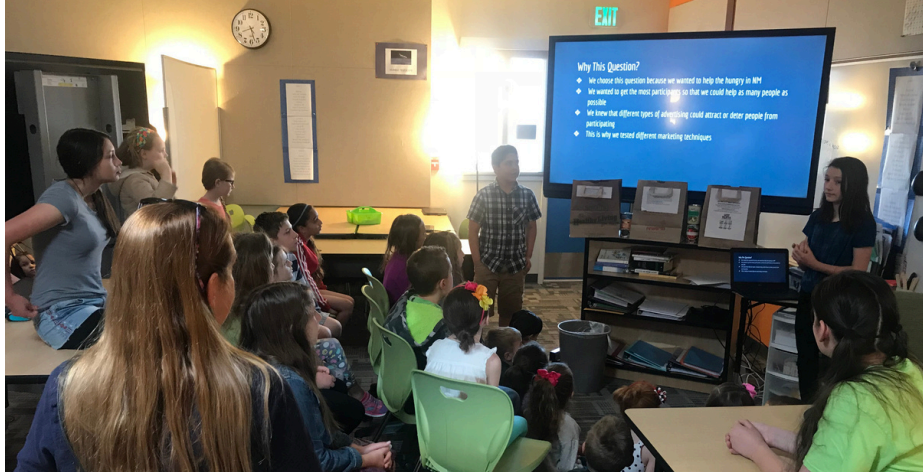
Identifying and distinctly describing the basic nature or qualities.



## Omission Analysis

Identifying what was left out and how the lack of inclusion impacts the understanding of the information.





# THE BELONGING CUES & CIA QUALITIES

Collaborative work is at the heart of Family School's curriculum. It drives our Problem-Based Learning, small group engagement, and student-driven exploration of content. We support students' *social-emotional learning* through the exploration and instruction of skills and mindsets needed to engage collaboratively *and within a variety of grouping structures*.

Students are directly instructed on skills and strategies for working in collaboration. In order to do this, we instruct skills in the "Curriculum in Action" or CIA qualities, and the Belonging Cues. Students collect data on their habits and exploration of these skills, reflect on them throughout the year, and engage with their growth in these areas in assessments and report cards.



# THE CIA QUALITIES

The “Curriculum in Action” Qualities or CIA Qualities were compiled and defined by Family School teachers. These skills represent those qualities which students must develop in order to engage productively in group problem-solving and tasks.

| CIA QUALITIES                       | EXTENDED MEANING                                                                                                            |
|-------------------------------------|-----------------------------------------------------------------------------------------------------------------------------|
| Teamwork                            | Able to work in both differentiated homogenous and heterogeneous groups                                                     |
| Continual Inquiry                   | Questions and engages in observation, experimentation, and error analysis to answer questions                               |
| Modeling                            | Creates visual, physical, and mathematical models                                                                           |
| Creative Critical Thinking          | Explores possibilities, organizes and processes information, problem solves, designs with or without constraints            |
| Embracing Directives                | Jumps on board and acts with humility and openness                                                                          |
| Optimistic Learner                  | Demonstrates passion, celebrates accomplishments, comfortable existing at the precipice of new learning, embraces ambiguity |
| Effective, Responsive Communication | Communicates with audience awareness and clarity                                                                            |
| Translates                          | Applies information from one context to another context                                                                     |



# BELONGING CUES

Adapted from The Culture Code: The Secret of Highly Successful Groups by Daniel Coyle)

## LISTENING

- With your body: eye contact, nodding, lean-in, facial expression
- With your words: avoid interruptions, say affirmations, ask questions, build on what the other person has said

## INTERACTIONS

- Sit in an arrangement that allows everyone to interact
- Opportunity to interact with a lot of different classmates

## INVITE INPUT

- Someone asks you for your input
- You ask someone else for their input
- Show gratitude when you receive it

## VOICE

- Multiple methods for hearing each other's sides
- Group members listen and talk in roughly equal measures

## THANKS

- Say it often
- Be specific

## SERVE

- A thousand little unselfish behaviors

# MATH OVERVIEW

At Family School, we teach math through a conceptual approach, emphasizing the use of manipulatives, such as Base-10 Blocks and fraction overlay tiles, and advanced questioning techniques. In this way, children construct their knowledge of numbers and operations, transitioning from curricula which deepens number and place-value sense into mastery of traditional algorithms.



We expect two things in math: The first is accuracy, where “silly mistakes” are evaluated for conceptual misunderstanding. The second is connective understanding as evaluated by a student’s ability to express their thinking out loud.

Our students engage with Mastery-level math in two distinct modes: Algorithmic Math Groups, and Möbius Math Workbook. Each serves a unique purpose, and taken together, we support students to address any conceptual gaps in previously-learned content, deepen conceptual understanding of algorithms, and engage with standards-aligned, rigorous math content at their grade level.

## Math Groups

- Students are placed in a small, differentiated group based on the algorithm they are *mastering*
- Students may be working to gain mastery of content that is at, below, or above their grade-level
- Each algorithm unit requires proficiency with the procedure and its use in real world scenarios
- This curriculum supports students’ overall math mastery

## Möbius Math

- Students simultaneously work through a grade-level, standard-based math workbook
- Each workbook addresses math standards across multiple algorithms, and includes content in geometry, measurement, data, and probability
- This curriculum ensures students access all of the standards of their grade

# MÖBIUS MATH



A Möbius strip is a closed loop which doubles back on itself. One can trace both surfaces of the loop without ever lifting their pencil. We refer to our Möbius curriculum as such because it is a spiral within a spiral--students loop back to reinforce curriculum throughout the year, from previous years, and are additionally exposed to content from years to come, due to our multi-age structures.

## **Philosophies & Practice:**

Möbius is the math mode that is used to provide broad exposure to grade level concepts based on the common core standards. Möbius is taught in whole group in order to expose all students to each concept at the different grade levels. For this reason, we consider it a spiraling curriculum. We believe that it is important that students have the opportunity to revisit the same concepts multiple times with older students reviewing previously learned material, and younger students being exposed to material before they are asked to master it.

The instruction is a flipped model with students attempting the work before the lesson and then driving the lesson with their questions in order to promote: metacognition, skill of learning from a text, dealing with ambiguity, problem solving, and a view of themselves as their first teacher. The classroom teacher facilitates the lesson through the application of the Zone Strategies. The Zone Strategies provide tools for students to promote their own engagement and comprehension as well as the engagement and comprehension of other students in the whole group setting. These tools are used by both students and teachers to develop a conceptual understanding of grade level math concepts.

## **At home:**

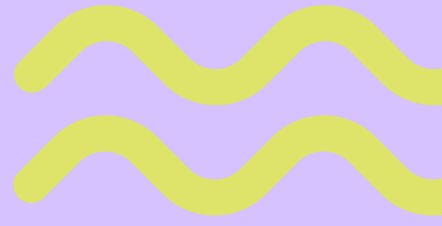
At home, students will complete portions of their workbook and generate Zone questions based on content that needs support in the classroom setting. They will keep up with completing portions of chapters in order to be prepared for Quiz and Test assessments on time, and will record their questions and lessons in a notebook that will move between school and home.

## **Unique Features:**

- Students placed in grade-level workbooks
- School-wide calendar for Möbius schedule
- Use of Zone Strategies
- Passing assessment score of 85% or higher
- Whole group instruction
- Student-driven lessons based on student questions
- Conceptually-founded lessons

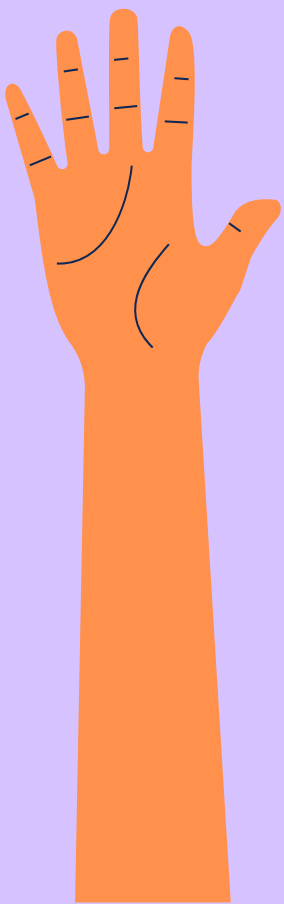


# THE ZONE IN MÖBIUS



## Students...

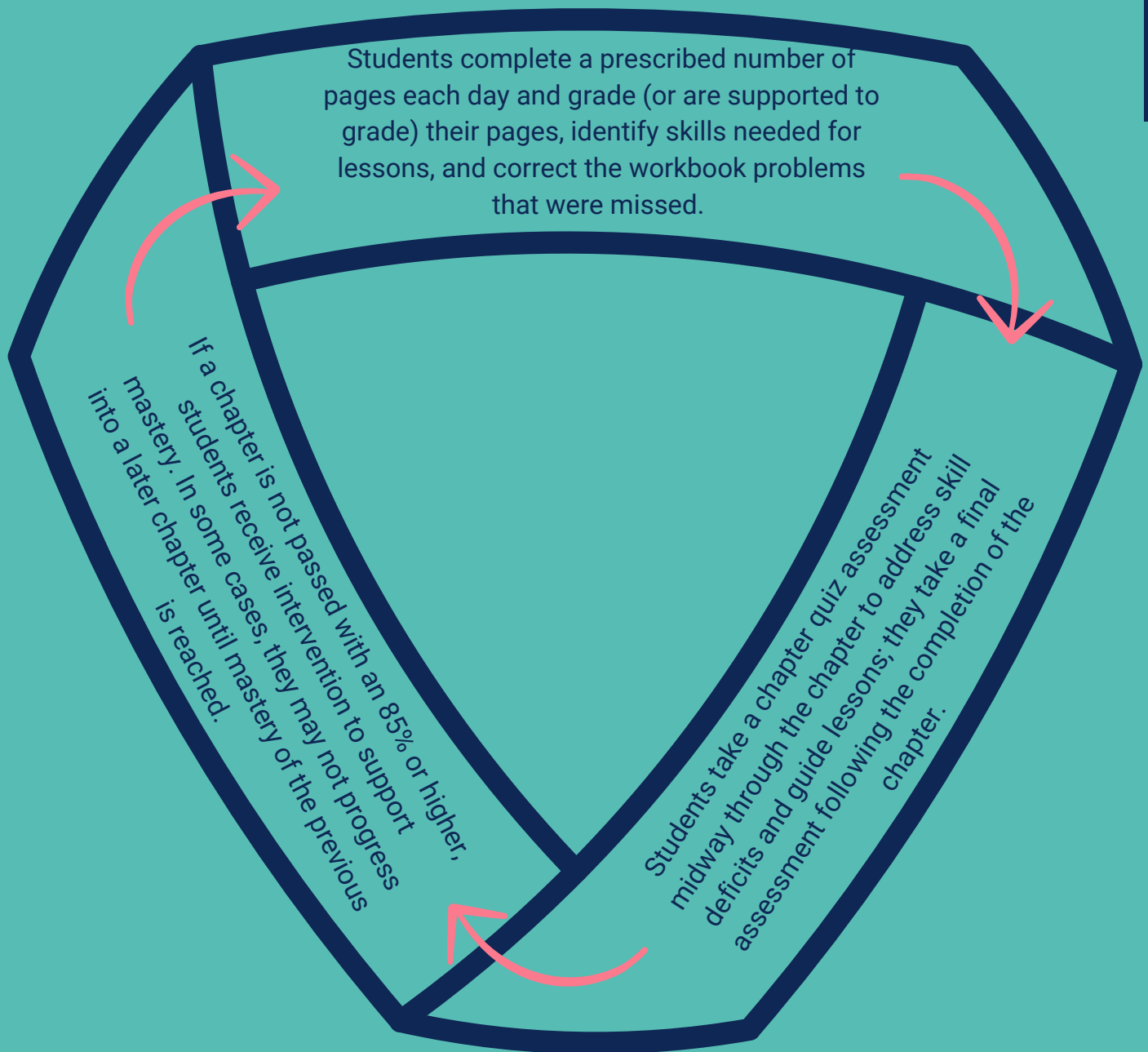
Identify their gaps in content as they work independently through the Mobius Workbook curriculum. As they find gaps, they create questions for the teacher and class using The Zone Strategies. They will record the frequency with which they use certain strategies, with the goal of practicing the use of each strategy a prescribed number of times in order to “graduate” to a higher level in The Zone. These Zone questions *drive lessons in the classroom*. All students are responsible for engaging with curriculum in lessons, whether it is from their workbook or one from a different grade. Students take notes in class and complete entrance and exit tickets. Their notes and lessons support homeschooling work.



## Teachers...

Teach class lessons based on student questions which address the content of the question-- they do not immediately tell a student “how to solve” the problem at hand. Teachers assess comprehension of lessons through questioning practices, Zone Strategy use, and the completion and grading of exit and entrance tickets.

# MÖBIUS UNIT CYCLES



# MATH GROUPS

## **Philosophies & Practice:**

While all of our other math modes focus on providing students with breadth and exposure to a variety of mathematical thinking, the focus of the algorithmic math groups is to promote deep conceptual understanding of each operation with both whole and rational numbers, providing students with a strong set of foundational concepts before promoting them into our geometry and comprehensive algebra unit.

We believe that students beginning in kindergarten are ready to wrestle with abstract understanding of mathematical relationships and patterns, and that the best way to do this is to take students from simple to complex functions of number sense and each operation in each unit. Most units begin with concrete teaching of the concepts using manipulatives where students learn to visualize the concept and generalize rules. Our FS units include: anticounting, addition, subtraction, multiplication, fractions, decimals, percents, geometry and algebra. Our students take a placement test at the beginning of the year. Based on information gathered from these tests, they are placed in small, homogeneous math groups. In their groups, students receive systematic instruction with pacing that is based on the group's understanding and mastery.

## **At Home:**

Students complete homework assignments based on the lesson they received that day in their small group. In some cases, students may have completed their homeschooling portion of the work while still in class. Parents support students to do their math group work using Family School methodology. These methodologies are trained in our Parent Academy classes, and available on our Math Resource Website. It is essential that parents and teachers use the same methodology while students are gaining mastery of an algorithm.

## **Unique Features:**

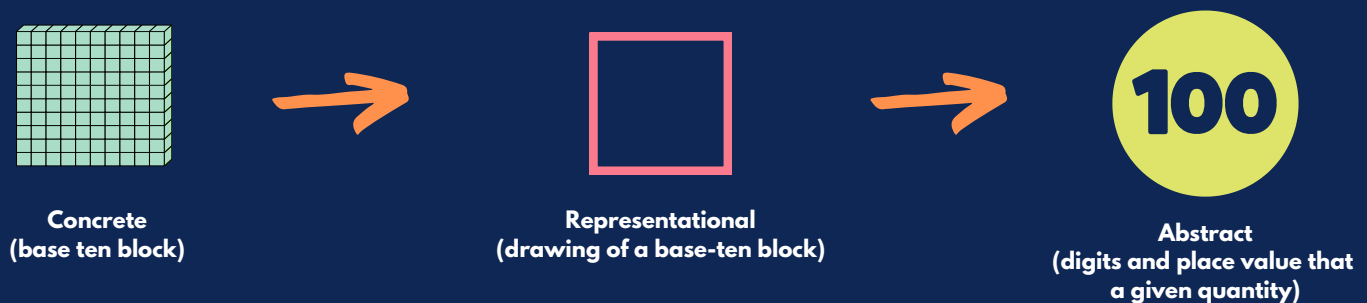
- **Homogenous small group lessons that meet multiple times a week**
- **Use of FS Placement Tests and Checkpoint assessments**
- **85% Mastery of all Checkpoints for promotion to next level**
- **Follows a progression of Anticounting-Algebra**
- **Instruction based in conceptual understanding before building to a procedural skill**



# MATH GROUPS

## Responsive Scaffolded Instruction: From Concrete to Abstract

Family School uses a concrete-to-representational-to-abstract sequence of instruction to make sure students develop a strong fundamental understanding of the math concepts/skills they learn. Starting with a concrete level of understanding for any mathematics concept/skill, students can build upon this strong foundation to later link their conceptual understanding to more advanced, abstract mathematics. Having students represent their concrete understandings by drawing simple pictures that mirror their work with concrete materials provides them with a scaffolded support to make the transition from accurate use of concrete materials to accurate calculations at abstract level (i.e., with abstract numerals and operation signs only). An added benefit of teaching students how to applying drawing to problem solving situations provides an excellent strategy for problem solving in the future.



## Intervention & Support

The more “over the edge” a student is in a particular math concept, the more concrete (e.g., use of manipulatives and other multisensory strategies) their work should be. As a student’s understanding of a given concepts strengthens and develops, the more abstract their work can be (e.g., moving from manipulatives to drawing, morning from drawing to only numerals and operation signs).

When a student demonstrates difficulty with a problem, it is important to analyze the problem to understand all of the skills required to solve the problem. The instructor can then isolate each given skill to test the student’s understanding and give support where needed. For example, a word problem requiring multiple steps and operations may require reading comprehension, understanding of order of operations, and algorithmic understanding of each individual operation (and the sub-steps within each operation). Once the problem skill or skills are identified, give the student support and practice on one isolated skill at a time. Once a student demonstrates mastery of a skill in isolation, more mastered skills can be combined, one skill at a time.



# MATH GROUPS SCOPE

Eighth Grade: Algebra Curriculum and Optional eCademy  
9th-grade Algebra (online) for credit

Seventh Grade: Completion of Percentages Curriculum and First Half  
of Algebra Curriculum

Sixth Grade: Geometry Curriculum (often done as a “flipped curriculum,”) and  
Algebraic Percentages Curriculum, which includes the application of  
equations to solve discount and markup scenarios, commission and profit,  
simple and compound interest, etc.

Fifth Grade: Fractions 2 unit comprising mixed numbers, with emphasis on real world  
application; Decimals Unit, with a focus on the decimals number line, connection to  
negative exponents, and real world use of decimals.

Fourth Grade: Fractions 1 Unit, comprising the bounded infinity between 0 and 1, and the use of  
fractions with all algorithms; emphasis on real-world application of fractions and the use of  
fraction tile manipulatives.

Third Grade: Multiplication and Division, with heavy emphasis on the use of Base 10 blocks to build  
and decompose arrays in order to fully understand the concepts behind the algorithm procedures.  
Introduction of exponents and properties of multiplication.

Second Grade: stacked addition, estimated sums (rounding), addition word problems (including time and  
money), counting and adding in bases other than 10, and all Subtraction content (which closely mirrors the  
addition curriculum).

First Grade: Sums up to 999 using manipulatives and drawings, reading and writing numbers into the quintillions, sums  
in the quintillions without manipulatives or drawings, stacked addition, and missing numbers.

Kindergarten (Anti-Counting): mastery of number, numeral, and combinations to 10; building, writing, and reading numbers and  
numerals from 0-1,000; introduction to the base-ten number system up to 9,999, including regrouping; comparing numbers,  
classifying numbers as even and odd, and early mental math strategies.

# BRAINTEASER

## **Philosophies & Practice:**

Math Brainteaser is designed to provide students with exposure to complex problems that foster creative and critical mathematical thinking. Being an exposure mode, the focus is not on correct answers as much as it is on the process of students using what they know in order to wrestle with ambiguity. Students are exposed to a variety of general strategies for approaching complex problems and are encouraged to develop their own strategies that are specific to the brainteaser itself. In Math Brainteaser, students are encouraged to work in a variety of group structures ranging from individual to whole group, depending on their needs and the needs of the class. Specific emphasis is placed on the use of the “community brain” which is the collective knowledge and thinking of the class. Math Brainteaser can be used as a first exposure to the types of thinking that will be used in their Mobius unit in order to prime the pump, promote confidence, and develop creativity in approaching the concepts that will be encountered.

## **At Home:**

This mode harnesses group skills, including CIA qualities and Belonging Cues, and thus does not typically go home in our curriculum. For families interested in working on them at home, Math Brainteasers are developed in unit form, rather than as isolated, one-off problems. This way, students can see themselves developing strategies and gaining skills after working on many of the same kind of brainteaser. Families should consider structuring any at-home brainteasers in the same way.

## **Unique Features:**

- **Exposure only**
- **Designed to reach above highest-performing students**
- **Combination of whole and heterogeneous small groups**
- **Use of Community Brain**
- **Use of strategies that are general to brainteasers and also some which are particular to certain kinds of brainteasers**
- **Promotion of multiple methods**
- **Process-focused**
- **Students do not all end in the same place**



# REAL WORLD MATH



## **Philosophies & Practice:**

Real World Math is the exposure mode in which students are given opportunities to apply and grow their mathematical understanding and knowledge while engaging in real world, self-as, high interest problems. Like Problem Based Learning, students are provided with an essential problem or set of problems that will allow for multiple methods of solving through the application of a predetermined set of concepts and skills. The groupings in real world math are typically small groups with frequent debriefs and discussions that happen as a whole group in order to expose all students to the variety of approaches to the problem, and to discuss overarching patterns and analysis. Because there is a real world focus, students are provided with a variety of real world texts, models, and tools for approaching the problem. The strategies used can draw from a variety of sources including: Zone Strategies, MBT strategies, NFR strategies as well as problem specific strategies that are developed over the course of the unit. Because of the real world nature of the mode, the unit often has a small culminating product at the end of the unit that highlights the application of math within the context of the real world problem. Real World Math can be used as a first exposure to the types of thinking that will be used in their Mobius unit in order to prime the pump, promote confidence, and develop creativity in approaching the concepts that will be encountered, as well as to answer the question, "how does this apply to me?"

## **At Home:**

This mode is typically taught in class only; however, components of a unit may come home as homeschool work, such as researching, completing computations, gathering resources, reading material, or putting together a portion of a final product.

## **Unique Features:**

- Exposure only
- Reaching above highest performing students
- Combination of whole group and heterogeneous small group instruction
- Use of Community Brain
- Real World application
- "Self-As" Component
- Allows for open-ended responses



# MATH CYCLES

Throughout the school year, students will work through overlapping math units, as well as cycles of different units. The structures generally are as follows:



## MÖBIUS MATH AND MATH BRAINTEASER OR REAL WORLD MATH UNITS

Möbius chapter cycles are typically 2 week units, with a quiz and a final assessment

Between Möbius chapters, students will work through a Math Brainteaser unit or Real World Math Unit that supports a related math concept (these are not followed by an assessment)

By the end of the school year, students will complete their grade-level workbook, receiving a 85% or higher on each chapter in 1 or more attempts (reteaching and retesting as needed)

## ALGORTHIMIC MATH GROUP UNITS

Students work through an Algorithmic Math Group Unit with a small group

As they display readiness, students complete Checkpoint Assessments for the unit, which test mastery of standards within each algorithmic unit

Students graduate from an Algorithm when they have completed all checkpoints in the unit with an 85% or higher; most students will move through the unit with their group members

# STRATEGIES IN BRAINTEASER



## Getting Started

- Get materials
- Get organized
- Start with what you know-- ask, "What DO I know?"
- Find a Community (Community Brain)-- listen to the thinking of others
- What do I need to know?
- Trial & Error
- Prioritize--choose one to start with
- Orderly Record Knowledge (ORK)

## Hitting a Roadblock

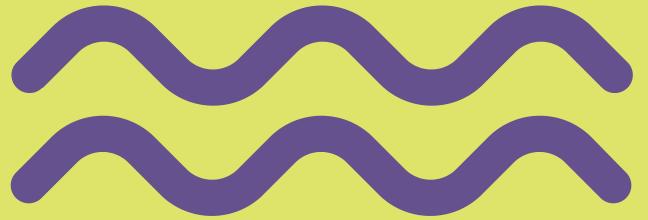
- Look for patterns
- Process of elimination (List possible answers/ eliminate impossible answers)
- Community Brain-- observe multiple methods, use Board Talk, compare answers, do Error Analysis
- Guess and Check
- Walk through a solution
- Be willing to RETHINK

## Building Endurance

- Break it into smaller parts
- Find an easier one or "Simple Simon" the problem using simpler numbers, etc.

# READING & WRITING

As with all of Family School's curriculum, our approach to reading and writing is multi-modal, and functions as a trajectory from Kindergarten to 8th grade.



Our emphasis is on developing readers who are able to extract pertinent information and details from what they read, show organized thoughts with main ideas and supporting details, and demonstrate critical thinking about wide varieties of written material. Students are taught strategies to read deeply, comprehend texts in both fiction and nonfiction, and engage in structured writing experiences designed to guide students through a critical reading process while at the same time teaching writing techniques. Family School emphasizes the reading and application of nonfiction material in core content modes, and teaches direct strategies for engaging closely with unfamiliar material.

Additionally, students arrive at a deep understanding of fiction by exploring and writing about the manner in which a book is crafted. They'll analyze writing techniques such as dialogue, brushstrokes, and foreshadowing, as well as considering the lens of the time, place, and societal values in which a book was written.

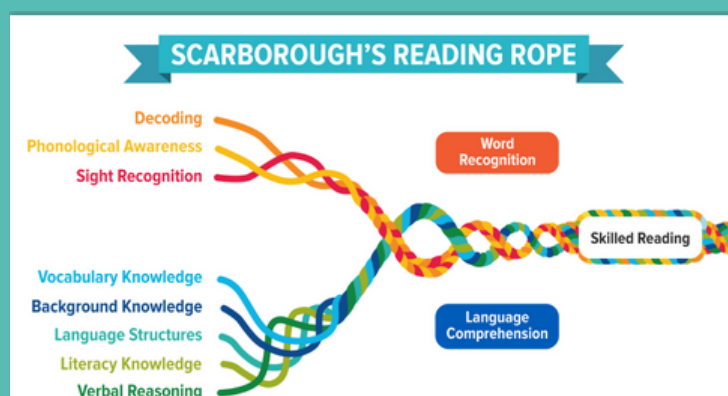
# EARLY LITERACY



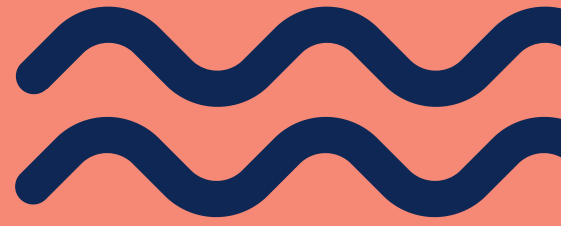
Students in K-2 will work through an early-reading curriculum aligned to structured literacy and the science of reading. Beginning with listening comprehension, letter knowledge, vocabulary, and phonemic awareness, students build the critical foundational language skills that are needed to become successful readers.

Throughout kindergarten and first grade, student assessments drive their lessons within a systematic, explicit phonics curriculum where their reading and spelling skills are closely intertwined. Pairing spelling skills with reading skills helps to cement the student's understanding of written words. The aspiration of K-1 being that students will demonstrate mastery in reading one-syllable words in every phonics pattern (from consonant-vowel-consonant through variant vowels and diphthongs) by the end of grade 1. Proper letter formation is emphasized in order to reinforce letter knowledge and develop the brain pathways that support reading. "Heart" words (or words with a part you have to learn "by heart") are introduced and practiced. Basic writing conventions (capitalization, spacing, punctuation, and spelling) are taught and practiced. Students at this stage read decodable books and passages that are carefully controlled to line up with their decoding skills. At the same time, students access more complex texts and reading comprehension instruction through read-alouds and reading response activities appropriate to their skill level.

In second grade, decoding strategies for multi-syllable words are emphasized, as well as a focus on meaningful parts of words (morphemes). Students learn about bases, roots, suffixes, and prefixes. The nine parts of speech are introduced, in support of reading comprehension and proper syntax in writing. Students move into reading longer chapter books and more complex reading responses, including writing structured paragraphs with a topic sentence, supporting details, and a concluding sentence. Reading and spelling concepts are uncoupled and students receive instruction in each area based on their demonstrated mastery of skills in the curriculum sequence.



# READING JOURNAL



## **Philosophies & Practice:**

Reading Journal is the mode that allows us to explore the reading and writing process, using great literature as a vehicle for creative and critical thinking and personal connection. Students are assessed at the beginning of the year and placed in small differentiated groups based on their instructional reading level, their writing level, and patterns in their critical thinking. Through the process of encouraging students to analyze literature through a variety of lenses, we believe that we can foster a love of literature and acquisition of the tools students need in order to become members of the “reader’s club.” Each of the Family School Reading Journals has a specific focuses that we call lenses. These lenses are based on a unique way of exploring and analyzing literature. The lenses are: retell, personal commenting, writing technique, structure, and research. Throughout each of the different journals, students are also encouraged to explore significant and universal themes in order to further richen the reading experience. The marriage between reading and writing is exemplified in this mode through direct reading instruction, rich literary discussions and writing instruction that nurtures each student's ability to express their thinking, building to essay form, and utilizing strong organization with specific evidence from the text.

## **At home:**

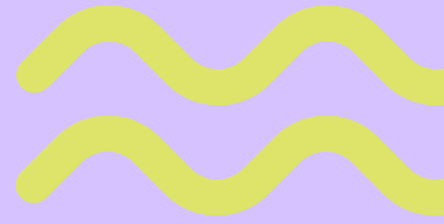
Students complete portions of reading and writing assignments as designed by the teacher. They will have a notebook of discussion notes and work from class to support reading and writing objectives. They may also spend time annotating, collecting evidence, or completing other tasks related to what they are reading.

## **Unique Features:**

- **Mastery mode**
- **Differentiated, homogenous small group lessons**
- **Use of reading journal lenses to promote literary anaysis**
- **Literature-based**
- **Combination of direct reading and writing instruction**
- **Literary discussion**



# CRITICAL REFRAMERS IN READING



**To deepen discussion and monitor comprehension of texts, we encourage families to use the Critical Reframers. Here are modeled Reframed Questions that can be applied for discussing or writing about what we read, both for school and for pleasure!**

## **Sequencing**

- Was the sequencing purposeful and if so to what purpose?
- What parts of the sequencing were necessary and which could have been different?
- Is the book open to a sequel and how or why?
- Do you recall any other stories that were sequenced in the same way?
- If you were to turn this book into a movie or play would you sequence it differently?

## **Prioritizing:**

- Were there parts of the book that could've been left out without losing the story?
- Were there characters that could've been enhanced in the story?
- Does the title fit the book and what would be other titles you would propose?
- Does the ending suggest resolution of the priorities in the book?
- Where does the author do his best work in the book?

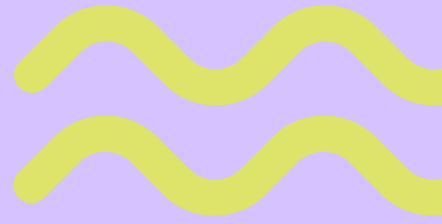
## **Defining:**

- What is the defining moment of the book, and what does it define?
- What do you wish the author defined more clearly?
- What things are left undefined and how does this impact the book?
- What characters are used to define the meaning of the book?
- How did the characters define their purpose or meaning in life?

## **Form/function:**

- How does the form of a character function in a way to send a message to the reader?
- Did the character function in such a way to be associated with a certain form and lead the reader into inferring more meaning into the character?
- Did the form of the event cause the reader to infer more meaning because of its form?
- Did the form of the setting allow the reader to connect to the story themselves?

# CRITICAL REFRAMERS IN READING



## **Means/ends:**

How does the story lead the reader to certain conclusions?

How did the author utilize writing techniques to encourage the reader to draw certain conclusions?

How did a chain of events result in a specific result and how did the author craft this so that the ends were not so obvious from the beginning?

How was the character change inevitable as the result of certain events and how did the author set those up?

## **Abstracting:**

How do certain character traits and behaviors lead the reader to believe the author is advocating for a certain understanding of humanity?

How do certain events lead the reader to want to change their pattern of understanding the world?

What worldview is presented by the author?

How does the story reveal the author's stand on issues?

How do different characters reveal the same sides of an issue?

## **Parameters:**

Through what range of emotion does the author take the reader and why?

Why is the story uniquely set in this time and place?

What time span in the life of the character was used and why?

How would the age of the reader impact what was taken from the story?

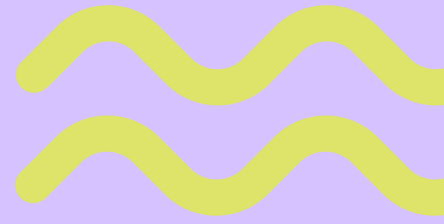
## **Comparing:**

Compare two characters and why their differences are important.

Compare the book to real life and why the author chose to portray it that way.

Compare two books and why the author shows the difference or similarity with time periods and how the time periods affect the plot.

# CRITICAL REFRAMERS IN READING



## **Classifying:**

Classify types of people in the world and how the book's characters demonstrate this.

Classify different types of books and why this narrative makes it this kind of book.

Classify different kinds of places and how the setting lends itself to the plot and characters.

Classify different kinds of audience and how this book relates to this audience.

## **Inducing:**

Induce using the details of the book to predict a theory that you think the book is presenting.

Induce using the details of the book to present your idea of an upcoming moral.

Induce using the details of the book to generate meaning about what the author thinks about character types or change.

Induce using the details of the book to conclude the structure or time frame of the story?

Induce using the details of the book to conclude the author's intention.

Induced using the details of the book to conclude any unresolved characters or plot seeds.

## **Deducing:**

Generate theory based on your prior experience predicting the details you will uncover as to:

How characters will develop

How plot will unfold

How time in structure will be handled

Reveal the author's intention

## **Constructing Support:**

Determine the ultimate character change and provide the details that make it happen.

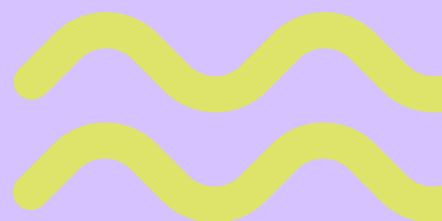
Construct the author's message to humanity and provide evidence from the book, or other books by the same author.

Construct the theory that this book is or will be a classic and provide the evidence.

Construct an opinion whether the book was successful in its intent and provide evidence.

Construct an opinion as to a particular audience for this book and provide evidence.

# CRITICAL REFRAMERS IN READING



## Analyzing Perspective:

How might the author's perspective been different if written in a different time period?

Why was the story told through its particular perspective?

How would the story be different if it was told through a different character's perspective?

How would different readers respond to the book?

How would different characters respond to a particular event and why would it be important to wonder this?

## Analyzing error:

How does the author use error to move the plot along?

In what ways could language have been used more effectively?

In what ways could plot have been used more effectively?

In what ways could character or setting been used more effectively?

Was the ending affective and why or why not?

Was there a point at which the book took a wrong turn?

This book would have been better if...

## Utility:

If the book was a tool, for what purpose would it be used?

To whom was the book least useful?

How would the utility of the book change if it was written in a different genre?

What could the author have done to change the utility of the book?



# NONFICTION & RETELL

## **Philosophies & Practice:**

Nonfiction Reading (NFR) is the mode that we use to teach students how to do close reading. For this mode, rich texts are chosen to build foundational knowledge in one of the other FS modes such as: workshop, NRG (science), and self-assessment that will be applied in the future. We believe that in order for students to truly understand a text, they need opportunities to “do” something with the text. They use the NFR strategies as tools to guide them in this process. These strategies are tools that they use to slow down their reading pace, organize and reorganize the information, make connections and analyze the text for the purpose of acquisition, comprehension, retention and application of the information.

Students are often taught to engage in annotation of the text in order to further deepen their understanding as well as to provide reference for future use of the text. Reading lessons are taught primarily through whole group instruction with small break out groups. Reading and strategy use are modeled in the whole group lesson and are used to promote comprehension through engaging discussion of the text. These deep discussions of the text content and the purpose and efficacy of the different strategies in each text are integral to the mode.

Additionally, students are taught to measure their comprehension through “retells” of portions of the text, which consist of organized and paraphrased verbal recounts of the key ideas. Retells are not performed on every paragraph of what we read, and are not the only comprehension metric taken.

## **At home:**

Students may have reading assignments in NFR for use in other areas in class. They should use the NFR strategies at home just as they do in class. Students should be encouraged to use any modeled annotation strategies at home as well. They may have comprehension activities or assigned retell passages at home.

## **Unique Features:**

- **Whole group lesson with heterogeneous small group break-outs**
- **Purposeful use *and instruction* of NFR strategies**
- **Use of rich nonfiction texts connected to FS curriculum**
- **Content-focused discussion**
- **Strategies are tools for comprehension assessed through paraphrased retell (idea for idea, not word for word)**



# THE NFR STRATEGIES

These strategies should be reviewed with teachers and in parent meetings to ensure understanding of their use in context. As with all strategies, it is more important that they are used to gain a deeper understanding of the text and to engage authentically; therefore, it is not essential to get hung up on a “right way” to use any given strategy. You may notice overlap between the NFR Strategies and our Zone Strategies-- that is because there are many overlapping skills needed for comprehension and engagement!

## “Fit” Strategies

- Restate
- How does it connect?
- Analyze forward to backward
- Define Vocabulary
- Build on Prior Knowledge (PK)
- Table Talk
- Specific Question
- Analyze with a Critical Reframer
- Perspective/ Author Purpose
- Structure Analysis
- Draw a picture or diagram to help

## “Personal Connection” Strategies

- Over the Edge
- Care and Concern
- Emotion
- Opinion
- Analyze through the Eyes of a Critic
- Predict/Inferences
- Personal Experience
- Restate as if it was your own idea
- Research

## “Creative” Strategies

- What if
- Why or why not
- Read with expression
- Explain the content for a different audience
- Make it fun

## “Memory” Strategies

- Finger-counting as a memory tool
- Mnemoimcs
- Heuristics
- Notes/ annotations
- Walkthrough the content [faster way]

# WRITING OVERVIEW



After engaging with reading content in both fiction and nonfiction, students will have many opportunities to write about what they have read, including formal essays, creative writing, and a variety of shorter response activities which will vary infinitely in relation to student-driven goals, teachers, classrooms, and content.

In every grade, students will develop skills to reflect on reading through a variety of lenses, and respond creatively or formally to material. We will build understanding of how to write a cohesive sentence and how to apply the “Brushstrokes” to add detail in writing. Students will work on structured paragraph writing, with main ideas, details, evidence, and conclusions/transitions. By fifth grade, students will be constructing formal five-paragraph essay with introduction and conclusion paragraphs, aligned to grade-level rubrics.

Additionally, students will write stories and poetry throughout the year, and will experiment with many different writing purposes.

# REAL-WORLD WRITING PURPOSES



Adapted from Write Like This: Teaching Real-World Writing Through Modeling & Mentor Texts by Kelly Gallagher (2011).

| Purpose                             | Explanation                                                                                                                                                                 |
|-------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Express and Reflect                 | The writer... expresses or reflects on his or her own life and experiences; often looks backward in order to look forward.                                                  |
| Inform and Explain                  | The writer... states a main point and purpose; tries to present the information in a surprising way.                                                                        |
| Evaluate and Judge                  | The writer... focuses on the worth of person, object, idea, or other phenomenon; usually specifies the criteria to the object being seen as “good or “bad.”                 |
| Inquire and Explore                 | The writer... wrestles with a question or problem; hooks with the problem and lets the reader watch them wrestle with it.                                                   |
| Analyze and Interpret               | The writer... seeks to analyze and interpret phenomena that are difficult to understand or explain.                                                                         |
| Take a Stand/<br>Propose a Solution | The writer... seeks to persuade audiences to accept a particular position or a controversial issue; describes the problem, proposes a solution, and provides justification. |

# THE BRUSHSTROKES

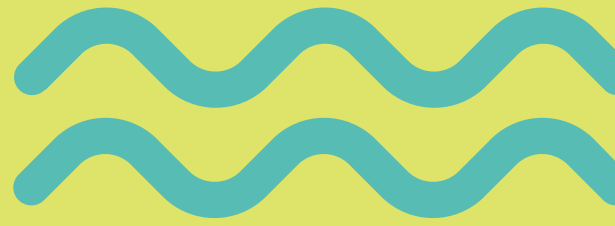


Adapted from Image Grammar by Harry R. Noden (1999).



| Name of Phrase/ Clause         | Definition and Example                                                                                                                                                                           |
|--------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Prepositional Phrase</b>    | <p>A phrase that starts with a preposition</p> <p><i><b>While they ate strawberries,</b> the children enjoyed the sweet flavor of a summer picnic.</i></p>                                       |
| <b>Participial Phrase</b>      | <p>A phrase that begins with verb in -ed or -ing form and is used as an adjective (modifies a noun)</p> <p><i>The lioness, <b>searching for food,</b> crept through the savanna.</i></p>         |
| <b>Absolute</b>                | <p>A phrase consisting of a noun and a participle that modifies the main clause</p> <p><i>The runners fought through the scorching heat, <b>muscles cramping with each push forward.</b></i></p> |
| <b>Adjectives Out of Order</b> | <p>A phrase consisting of one or more adjectives that falls after the noun it is modifying</p> <p><i>The ranger spotted the lost child, <b>frightened and confused.</b></i></p>                  |
| <b>Participles</b>             | <p>A phrase that begins with a list of verbs ending in -ed or -ing</p> <p><i><b>Coiling, slithering, and hissing,</b> the snake pursued the mouse.</i></p>                                       |
| <b>Appositive</b>              | <p>A noun or noun phrase that renames another noun</p> <p><i>The school, <b>a lifeless structure,</b> stood solemn and silent in the distance, awaiting the return of the students.</i></p>      |
| <b>Infinitive</b>              | <p>An unconjugated verb - to + the simple verb form</p> <p><i>The kitten leaned back on its haunches preparing <b>to pounce</b> on the unsuspecting grasshopper</i></p>                          |

# SOPHIE & WRITING BRAINTEASER



In Family School, we approach elements of spelling and grammar through lessons in two modes: “Sophie” Dictation, and Writing Brainteaser. “Sophie” is a nickname for our mastery-level spelling and grammar mode, and the name comes from the original text Family School used for dictation, Sophie’s World: A Novel About the History of Philosophy. In Sophie lessons, we address spelling, grammar, and other writing conventions including vocabulary, tone, prefixes, suffixes, root words, etc.

Writing Brainteaser units are developed to provide experimentation and exposure opportunities with writing techniques, styles, brushstrokes, conventions, and writing purposes outside of a conventionally assessed structure. Working in small groups, students are invited to practice their collaborative skills while engaging with a variety of writing standards within the brainteaser context.

# SOPHIE DICTATION



## **Philosophies & Practice:**

The Sophie mode has two parts. Part 1 takes the form of a dictation from a text that is rich and deeply connected to another mode (workshop, NRG or self-assessment). Students are motivated to learn the writing conventions associated with the text, because they see how they will apply them to their work in the future. We believe that students retain knowledge about spelling, punctuation, capitalization, and grammar rules best when they learn them within the context of a meaningful piece of writing. Students are given a pre-test at the beginning of the week and are encouraged to analyze their errors in order to identify questions. While tests are being graded, students have an opportunity to read and make meaning of the text, using their nonfiction reading skills. The lessons are student driven with students sharing their questions and teachers supporting the students in answering the questions using present knowledge, research and direct instruction. In analyzing their performance, students are encouraged to make note of their short term improvement (from pre to post) as well as their long term improvement (from post to post, and from pre to pre). Sophie Part 2 allows students to zero in on specific writing skills for a week. The combination of the two parts help students to build a strong foundation of writing conventions and techniques and how those conventions and techniques impact meaning.

## **At home:**

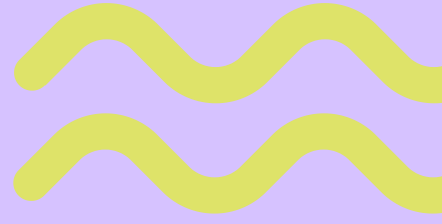
During a Sophie cycle, students will have assigned homeschooling work around the goals and expectations of that particular unit. They may be instructed to practice sentences in context, to play “Sophie Flip” or “Sophie Buzz” with a homeschooling teacher, or to research or practice any other related conventions or goals within the unit. The goal in Sophie is not to drill a list of spelling words; instead, students should analyze and practice patterns and spelling within context.

## **Unique Features:**

- **Mastery is focused on IMPROVEMENT, not an 85% score**
- **Whole group lesson driven through The Zone**
- **Dictation pre and post test**
- **Conventions taught within the context of a nonfiction text**

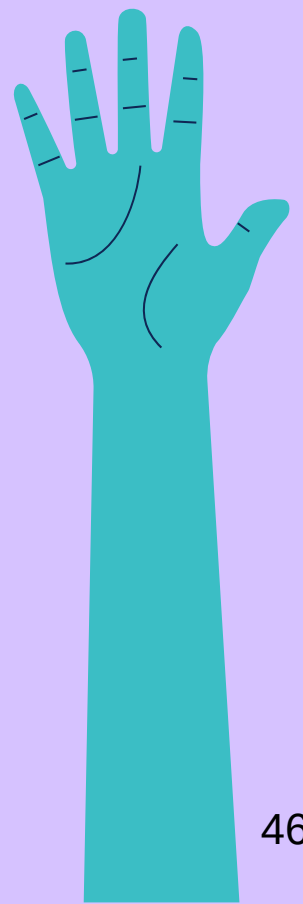


# THE ZONE IN SOPHIE



In Sophie, students make meaning in their spelling studies by spelling in context. In K-1, Sophie sentences are intertwined with a student's phonics lessons (e.g., a student learning to read CVC words will be writing tightly controlled sentences with CVC words). An emphasis is also placed on proper letter formation in K-1 Sophie passages. In second grade, students move into Sophie ABC and their Sophie spelling is uncoupled from their reading studies. Students tackle longer passages with more complex and content-specific words. Students are also asked to perform grammar analysis on their Sophie passages, examining the words in their passage to determine the part of speech of each word.

In the older grades, Sophie lessons are driven by the use of student Zone Strategies regarding content, conventions, spelling patterns, roots, prefixes, suffixes, and rules, or related to any of the content in their Sophie Part 2 lessons. While there are mastery and standards-aligned expectation for Sophie, it is a mode that is driven by student questioning and skill gaps, following the input of questioning in class and the evaluation of formative assessments throughout the lessons.



# SOPHIE TECHNIQUES

## Sophie Flip

The objective is to pay attention to detail and learn from examples of correct writing. Every moment you read, you are given a model of correct spelling, punctuation, and grammar.

- Turn over the dictated sentence and look at the typed version.
- Student identifies errors they think they may have made in their spelling of the dictated sentence.
- Turn over typed version and look at hand-written version.
- Correct the sentence based on internalization of spelling and grammatical conventions.
- Repeat until 100%.

## Focus on Patterns, Roots, Origins, etc. in mini- lessons

The objective of these mini-lessons are to learn the rules and conventions beyond the particular test.

- Teach rules and patterns, focusing on reiteration of concepts using a variety of words and examples.
- In spelling, examine word families, rules, roots, prefix, suffix, origin, etc.
- In punctuation, examine the rules, parts of speech, brushstrokes, placements of clauses, etc.
- Practice the dictated sentence again to examine the extent to which lessons are sticking.

## Sophie “Buzz”

The objective of this activity is to develop the student’ inner voice that helps them monitor their spelling and punctuation.

- Position yourself so you can see your student’s writing, with the typed version in your hand as necessary for reference.
- Dictate the sentence to your student.
- Closely watch the student. As soon as they make error, say “buzz” or “beep.”
- Student should correct error immediately. If they cannot, this word now becomes the focus of a lesson.

# WRITING BRAINTEASER

## **Philosophies & Practice:**

Writing Brainteaser is designed to provide students with exposure to a variety of writing techniques and elements for both fiction and nonfiction. In the nature of our Self-As approach, students spend the mode writing in order to experiment with the techniques through a combination of imitation and creation. Through the experimentation, students learn to create a variety of effects that they will be able to apply to their mastery writing in the future. Lessons are structured with quick pacing to allow students to write, share, discuss impacts and purposes, and return to their writing.

While other kinds of brainteasers may be purchased in collections and anthologies, writing brainteasers are generally developed responsively by Family School teachers and are typically related to a writing skill that is needed in a mastery mode for other areas of curriculum.

## **At home:**

In general, Writing Brainteaser will be primarily taught and practiced in class with minimal expectations of students researching or completing components at home.

## **Unique Features:**

- **Exposure only**
- **Reaching above highest performing student**
- **Combination of whole and heterogeneous small groups**
- **Writing, sharing, and feedback throughout the lesson**
- **Build of lesson is in writing skills**



# SOPHIE AND WBT CYCLES

Students will typically complete 12-15 Sophie Cycles, each with a pre- and post-test assessment and related Sophie Part 2 content. Sophie Part 2 structures may be organized as formal lessons in related grammar or vocabulary content (parts of speech, tone, prefixes/suffixes/roots, word connotation, etc), or they may exist as Writing Brainteaser Lessons.

Writing Brainteaser may also take the form of a unit that is not connected to a Sophie Cycle, depending on class needs.



## GENERAL SOPHIE UNIT STRUCTURES

Students take a dictation pre-test. While that test is being graded by the teacher, they may begin identifying their own errors and finding material for student-driven lessons.

Throughout the week, students participate in lessons and complete nightly homework around Sophie content. Lessons are driven by the Zone, and utilize entrance and exit ticket assessments.

Students take a post-test of the same dictation material to assess development. Following the Dictation post test, Sophie Part 2 Lessons begin around other elements of the content.

# WORKSHOP AND “NRG” SCIENCE



At the heart of our curriculum sits a very special, year-long thematic arc which we call Workshop. Students across all grades participate in workshop units which are designed to be cross-curricular, collaborative, and highly engaging. Teachers design their units each year connected to the research they have done or are in the midst of doing in a field that meaningfully interests *them, as well*. This provides students, teachers, and parents the opportunity to engage simultaneously in learning new science or social studies content. Themes are as limitless as our curiosity: trees, oceanography, the history of food, the history of the universe, circles, spheres, rivers...

In addition to the science standards students engage with embedded in workshop and science projects, they additionally will receive direct instruction in science through our “NRG” science mode. Using the Next Generation Science Standards, we nicknamed our science mode “NRG” to stand for the “Next Ready Generation” of scientists we hope to build.

# WORKSHOP



## **Philosophies & Practice:**

Workshop is at the core of who we are as a school. It is the mode that drives the learning for the whole year and is the vehicle for developing common knowledge and community in the classroom from the first day of school forward. It takes the form of a theme connected to science and/or social studies content that will be explored through four to five workshop units each. Each workshop unit is designed around an essential question that will be explored through: PBL, Design/Systems Thinking and/or Inquiry. It is the mode that calls for application of knowledge and skills acquired through all of the other modes that are brought to life through a “Self-As” component that is embedded in the science and social studies content. Students work in small collaborative groups to construct deep conceptual knowledge that will excite and inspire them to answer the essential question, using critical and creative thinking, allowing for a student driven approach. The workshops are designed to promote this collaborative work using group behavior and thinking strategies that lead to the bonding of the community around the acquisition and exploration of each other’s knowledge. Each workshop builds to a culminating project that will allow the students to express their ownership of their learning in a variety of ways through both physical/visual models and verbal presentations.

## **At home:**

Workshop exists as a group structure in the classroom; however, portions of individual expectations for the group assignment may go home as homeschooling to be completed prior to returning to the group. This could include reading, writing, research, or some other creative component to a group task.

## **Unique Features:**

- **Exposure, but with checks for the understanding of key ideas**
- **Small Group**
- **Combination of Teacher and Student-Driven**
- **Multi-modal: in acquisition, processing, and expression of knowledge/observations**



# NRG SCIENCE

## **Philosophy & Practice:**

The NRG mode allows teachers to supplement students' science knowledge with a more traditional approach to teaching the NGSS science standards. Topics for NRG are chosen from standards that are not being covered in workshop and science projects. NRG units consist of research to allow students to construct knowledge and generate interest; hands-on labs/inquiries, activities, or simulations to allow students to apply their knowledge; and a comprehension quiz or culminating assignment to give students an opportunity to test their comprehension. Because we believe that students learn best when they are empowered with tools to own their own learning, each unit is designed to allow students to utilize the Zone strategies, NFR strategies, Critical Reframers and/or Belonging Cues to collaborate and build knowledge together.

## **At home:**

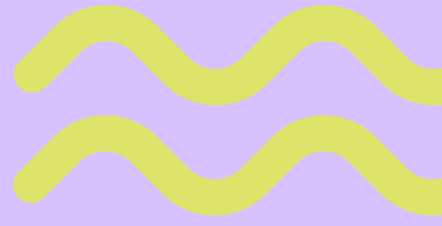
Components of units may be assigned as homework, such as reading, research, written expectations, or elements of projects or explorations from class.

## **Unique Features:**

- **Mastery expectations, culminating in a comprehension quiz or assignment**
- **Standards-based using the NGSS Science Standards**
- **Multimodal in the acquisition, processing, and expression of knowledge and observations**
- **Combination of whole and heterogeneous small groups**

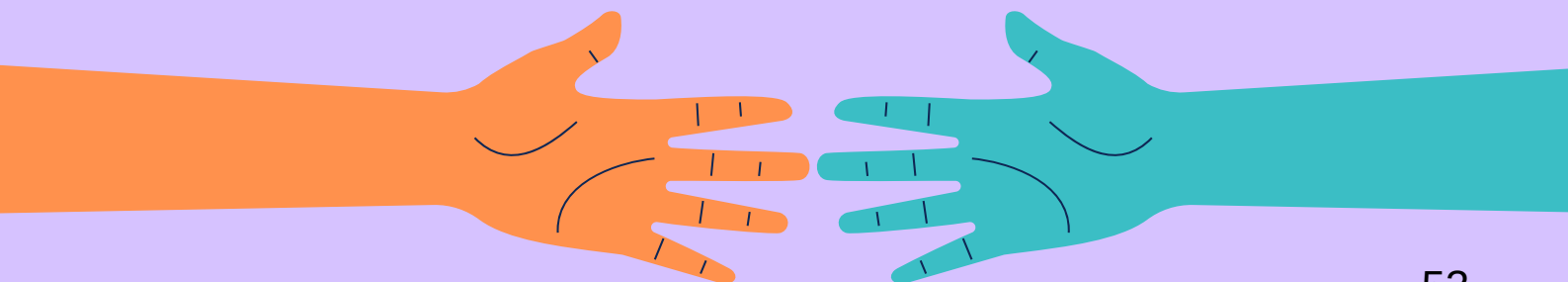


# BELONGING CUES AND CIA QUALITIES IN WORKSHOP/NRG



Workshop and NRG are, at their heart, learning modes centered on social-emotional learning wherein we are working specifically to develop social-learning skills in small groups.

In workshop and small NRG groups, students are encouraged to directly apply Belonging Cues and intentional skills within the CIA (Curriculum in Action) Qualities to deepen their group work and effectiveness in communication, teamwork, and collective problem-solving. Students may collect data on their use of skills related to the Belonging Cues and CIA Qualities, and will be asked to reflect often on how their use of these skills depends their engagement with content and connections to peers and new ideas.



# INQUIRY

The purpose of our Inquiry mode is to keep alive the foundational curiosities that envelop childhood. Why is the sky blue? What makes tree leaves turn different shades of orange? What types of materials can worms process as food in my compost? How can I control my dreams?

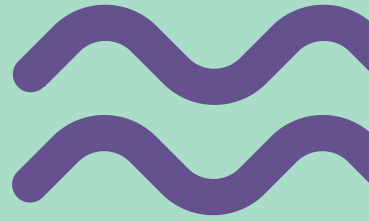


Student questions are as infinite as their wonderings, and our job as homeschooling teachers is to foster that curiosity and allow students to develop their own ways to collect data and answer those questions.

What makes a good inquiry question? Any content is worth exploring! Though our inquiry process is reminiscent of a traditional “science fair” experiment, and utilizes elements of the scientific method, questions need not be only about science-- students can explore art, food, culture, sports, pets, math, poetry-- anything that meaningfully ignites their curiosity.

The inquiry process or inquiry journal has three major components: the pre-investigation stage, the investigation, and the post-investigation stage. Expectations for the amount of reflection, data, and explanations a student will provide will increase as students get older.

# INQUIRY



**“The fatal pedagogical error is to throw answers like stones at the heads of those who have not yet asked the questions.”**

**~Paul Tillich**

## **Philosophy & Practice:**

This quote is at the core of how and why we believe that inquiry is one of the most important modes taught at Family School. Inquiry provides students with the opportunity, tools and empowerment to ask and answer their own questions. The inquiry process begins with students wondering about the world around them and then allows them space to take their questions and refine and clarify them through the reframing process. The critical reframers allow students to vary their thinking and find the place where their wonderment lies and can be explored through a meaningful and manageable process. The focus of inquiry is not on the answers. The focus is on the process and the empowerment a child experiences when they see that they have the tools they need to be the discoverers of knowledge. The process also allows them the opportunity to think and rethink their ideas, draw conclusions and then to communicate them with clarity and with evidence. Embedded in the process is instruction on using a variety of critical thinking tools, how to write a clear design/investigation, how to collect and present data, and finally how to analyze the data and communicate findings.

## **At home:**

Portions of mini-inquiry projects may be completed at home with guidance and support from the homeschooling teacher. In some cases, students may be focused on just an element of the inquiry process, or may be completing the entire inquiry process from pre-investigation to post-investigation. Parents are integral in supporting students to find inquiry questions which satisfy the depth of their grade-level and which are realistic for testing, while still honoring the authentic curiosities of their child's interests. This is a mode that demands a great deal of parent simultaneity and input throughout the process.

## **Unique Features:**

- **Exposure mode with checks for understanding of key ideas**
- **Student driven**
- **Use of Critical Reframers**
- **Aspects of the process embedded throughout the year**
- **Qualitative and quantitative data and data representation**
- **Students do not directly answer questions through research**

# INQUIRY PARAMETERS

Inquiry depth will look different as students get older, and while older students may demonstrate higher levels of independence, the Inquiry Process is an area where parents should expect to be checking in, supporting, and collaborating with students, regardless of their grade level.



*When students are designing their Inquiry Projects, they should be reviewing their depth against the following “4 M” criteria:*



## **EASURABLE**

Is there a clear way to collect data for this question? Is it quantitative or qualitative data? Will we be able to control for variables?



## **MEANINGFUL**

Does this inquiry truly interest me? Will I care about it enough to reiterate it if need be?



## **JUSTIFYING**

Do I truly not know the answer to this question, or do I already know the answer? If so, can I reframe my question further to find something that is truly new and puzzling to me?



## **MAGNITUDE**

Can I collect enough pieces of data for this to have magnitude in my research? Have I designed this with enough trials? How many pieces of data would be needed for this to have magnitude as a project?

# THE INQUIRY PROCESS

*\*Inquiry expectations will vary from class to class and project to project, and will become more stringent as students get older.*

*Please use this overview to generally guide your work in inquiry, and follow directions from your teacher for specific criteria*

## Pre-Investigation Stage

### Question

- Do not pick a "yes" or "no" question or a single number answer.
- Student generated/ownership.
- Purposefulness and meaning of question - want to change the world.
- Connecting questions to the content, to themselves, to their own learning.
- Practical plans questions - what is the best savings account?
- Can use multiple questions or critical reframers in one; allows for more in-depth follow-through and, usually, better thinking.
- Open-ended questions.
- Feasible to explore; reframe to make do-able.
- Relate to interests.
- Survey questions can be used to supplement a question.

### Brainstorm

- Stormy and edgy thinking.
- Connects to inquiry question.
- Broad-based; covers all parts of inquiry process.
- Can have tangents but they should relate.
- Can use webs, pictures, lists, free-writes, graphic organizers.
- Use as a tool to identify vocabulary or quick facts you might need for the inquiry.
- Should show expanded thinking, expands inquiry question, or makes the question more interesting.
- Make it fun with lots of interaction and discussion.

### Present Knowledge

- Should be written in sentence form.
- Allow present knowledge to be incorrect, it should be what student thinks they know.
- Does not have to directly mirror the brainstorm, but takes brainstorm and tries to make sense.
- Should be broad-based (can have a few tangents).
- Include what you don't know and source of your knowledge.
- Helps to define knowledge and edge of learning.
- Self as (put yourself in other's shoes i.e., zoologist).
- May add to brainstorm, if not already there.
- Edgy thinking and specific.

### Postulate

- Best guess to the answer of your question.
- Relates to the question.
- Broad enough to cover the important points.
- Based on prior knowledge.
- Provable and specific.
- Provide reasons for the guess; answers "why".
- Utilize specific measurements and details.

### Design

- Written in logical, orderly manner, legible and specific.
- Written so that it is clear enough to replicate.
- Check for practicality.
- Uses specific measurements and labels all units.
- Provides a list of materials and resources needed or used.
- Addresses question, postulate to prove or disprove.
- Think through the process.
- Try to anticipate problems.
- Run the plan by an adult.
- Budget the time needed/include time estimate to focus the work.
- Practice data collection.

# THE INQUIRY PROCESS

## Investigation Stage

### Journaling

- Written in chronological order, as if writing a diary.
- Usually written in present tense as it is happening.
- Write out what you are actually doing, thinking, collecting.
- Use full sentences and make them understandable for others to be able to replicate your process.
- Have fun in process/investigating and let your writing reflect the fun.
- ORK Orderly recording of the student's knowledge.
- Use brushstrokes to convey meaning in best way possible.
- Be clear in your writing.
- Connect your ideas.
- Give examples.
- If design changes, articulate change in journaling.
- Take as many pages as you need to write out this section, don't try to fit it all on the pages given.
- Draw conclusions and analyze data collected as you go - (this will help when you go to write the critical analysis).

### Data Collecting

- Identify what type of data you are looking for; is it qualitative (what type of pizza do you like best?) or quantitative (how many times have you eaten pizza in the last week? Collecting a number amount).
- If quantitative data, use specific measurements and units.
- If qualitative data, use a controlled vocabulary.
- Sketch illustrations to aid in communicating to yourself and others what you are doing.
- Let your data or computations show their progression to the final answer.
- Label your data and computations so that it is easy to follow.
- Articulate clearly.
- ORK.
- Make sure the data reveals the relevance.
- Be as accurate as possible.
- Control your variables.



# THE INQUIRY PROCESS

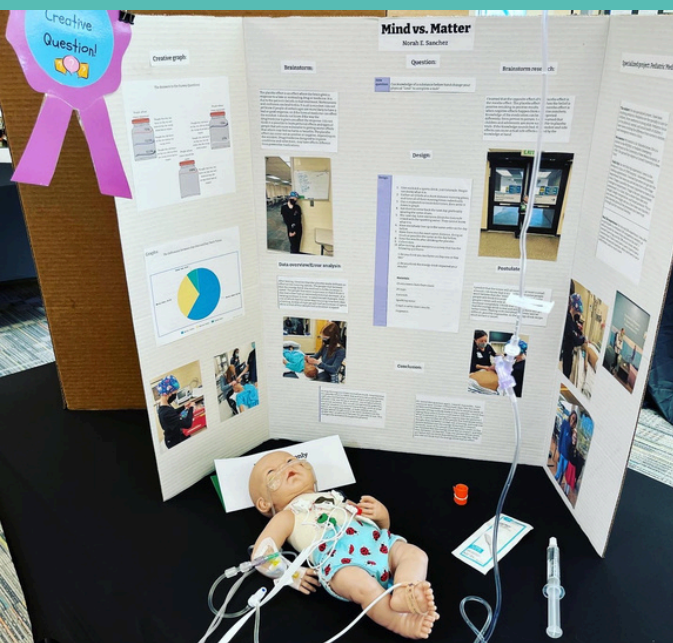
## Post-Investigation Stage

### Data Presentation

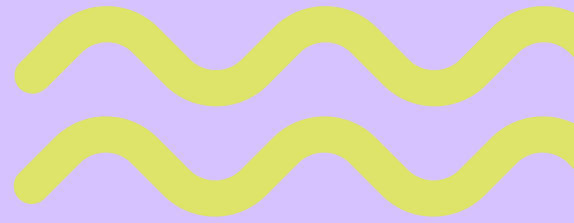
- Label all parts of charts, graphs, tables; include titles.
- Identify intervals on axes correctly.
- Select a form of presentation (i.e., graph, table, chart) that best fits your data and concepts you want to get across
- Primary expectations: pictographs, stem and leaf plots, scatter plot, tables, charts, diagrams, median, mode, range, ordered pairs.
- Intermediate expectations: box plot, circle or pie charts, line graphs, mean, linear equations, systems of linear equations.
- May want or need to present more than one chart to get across your ideas.
- Be creative and professional in your design.
- Proofread your data for errors.

### Critical Analysis

- At least one of the paragraphs must analyze the data and draw conclusions .
- Use the critical reframers to critically think and write about what you have done. (Primary: 3 paragraphs; Intermediate: 5 paragraphs).
- Vary your reframers from inquiry to inquiry.
- Look at your work critically and objectively.
- Wonder and think beyond what you have done (think deeply).
- Order and sequence your paragraphs.
- Transition your paragraphs.
- Use brushstrokes and specific writing.
- Demonstrate audience awareness.
- Develop specific vocabulary pertinent to the question content.



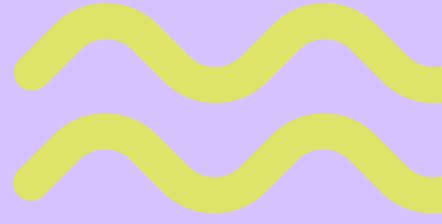
# CRITICAL REFRAMERS IN INQUIRY



\*Real examples of reframed student inquiry questions.

| Reframer             | Examples                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
|----------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Comparing            | <ul style="list-style-type: none"> <li>How does the dating of topsoil in different areas compare?</li> <li>How are people's physical reactions to Bluey episodes different considering their stage of life, gender, race, or experiences?</li> <li>How do types of apples differ?</li> <li>How do people of the same age interact differently than people of a different age?</li> </ul>                                                                                   |
| Classifying          | <ul style="list-style-type: none"> <li>If people were to sort songs into categories of feelings, would the songs be related or in the same genre?</li> <li>What are the different classifications of oranges and how do you identify them?</li> <li>How do the classifications of an animal relate to its traits and appearance?</li> </ul>                                                                                                                                |
| Inducing             | <ul style="list-style-type: none"> <li>Given its use in films like movies, how can we prove that music can influence feelings?</li> <li>Based on how all celestial bodies in space can be seen as small lights in the sky from Earth, what makes things like planets shine like (sometimes brighter than) stars?</li> <li>Crows can recognise face. Using this as a foothold, how can I teach them to recognise mine, and as a good one?</li> </ul>                        |
| Deducing             | <ul style="list-style-type: none"> <li>Since it is used to convey emotion, can learning other people's opinions help me understand it better?</li> <li>What does the way someone perceives an image say about their life?</li> <li>If rock strata tells us about an area, what can that tell us about specific areas?</li> </ul>                                                                                                                                           |
| Constructing Support | <ul style="list-style-type: none"> <li>What arguments support that stars originate from molecular clouds?</li> <li>How can I build support for the argument that social interaction is important for human development?</li> <li>How can we show changes over time to support what the environment must have looked like at some point in time?</li> <li>What evidence can be found to prove that parents react to episodes of Bluey differently than children?</li> </ul> |
| Abstracting          | <ul style="list-style-type: none"> <li>What is the pattern in the way people percept optical illusions in respect to gender, age, eye color, etc differences?</li> <li>What pattern can I discover about human interactions (both with similar and different ages)?</li> <li>What patterns are always visible in erosion? Which only occur under specific circumstances?</li> </ul>                                                                                        |
| Perspective Analysis | <ul style="list-style-type: none"> <li>How would somehow placing a star in Earth's atmosphere affect it?</li> <li>Do different crows prefer different types of food? Do any even have opinions? Are they picky?</li> <li>How is perception of time altered when a person performs different tasks?</li> </ul>                                                                                                                                                              |
| Error Analysis       | <ul style="list-style-type: none"> <li>How can the classification of stars by their color and temperature be improved?</li> <li>How can movement of different materials affect our ability to reconstruct the past of an area?</li> <li>What errors am I continuing to make in my fractions assessment, and how can I build strategies to address them?</li> </ul>                                                                                                         |

# CRITICAL REFRAMERS IN INQUIRY



| Reframer          | Examples                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
|-------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Means/End         | <ul style="list-style-type: none"> <li>• Would I do better, worse, or equal to normal if I ran a mile with different kinds of music than none at all.</li> <li>• If I want any star to have a solar system, how will I need to alter its environment?</li> <li>• How does the initiation of a social interaction affect the result?</li> <li>• How can we use time and erosion and entropy to reconstruct the past?</li> </ul>                                   |
| Form/Function     | <ul style="list-style-type: none"> <li>• Given that humans are at first awkward when first meeting each other, how will this change if I alter certain aspects of their first interactions?</li> <li>• How does perception of time affect how it is spent?</li> </ul>                                                                                                                                                                                            |
| Utility           | <ul style="list-style-type: none"> <li>• What would be the utility of things like listening to music while doing something like running a mile, and would it help me do better or worse?</li> <li>• What are the evolutionary advantages for crows to be able to remember faces?</li> <li>• What is the utility of talking to new people?</li> </ul>                                                                                                             |
| Sequencing        | <ul style="list-style-type: none"> <li>• What is the order of events that must happen for a star to host its own solar system?</li> <li>• What is the sequence of events on which a conversation becomes bad or becomes good?</li> <li>• How can some forms of erosion trigger others?</li> </ul>                                                                                                                                                                |
| Prioritizing      | <ul style="list-style-type: none"> <li>• What is the most important step in building a relationship with crows?</li> <li>• What do most people want to get out of a social interaction?</li> <li>• Is the most important part of controlling an enclosed environment? What changes unbalance it?</li> </ul>                                                                                                                                                      |
| Parameters        | <ul style="list-style-type: none"> <li>• How close do you need to put two stars together that it would affect them in any way?</li> <li>• How long does it take to build a relationship with crows?</li> <li>• Which kinds of people do different people want to socialize with?</li> <li>• How can small changes alter a closed environment? How much can an environment change over time? How does this compare to past change in Earth's climate?</li> </ul>  |
| Defining          | <ul style="list-style-type: none"> <li>• What makes a star a star?</li> <li>• What's different about an optical illusion that causes the human mind to see it differently than how it is?</li> <li>• What characteristics define a successful and satisfying human interaction?</li> <li>• What is time? How do people consider its passage?</li> </ul>                                                                                                          |
| Omission Analysis | <ul style="list-style-type: none"> <li>• How does the mystery of black holes affect what we know about their formation from burnt out stars?</li> <li>• What are the ethical issues with feeding crows? How can I avoid them?</li> <li>• What variables cause major differences between those who can see an optical illusion than those who can't?</li> <li>• What step is often left out in a human interaction that would have changed the result?</li> </ul> |

# HOMESCHOOLING PROJECTS

Projects are a way for students to explore specialized knowledge about a content area and to explore their own learning. Projects are often largely completed at home, but may connect to the classroom's theme or be supported through learning experiences in the classroom setting. There are three projects which will become a part of the final report card of the year: science, social studies, and one other of the teacher's choosing, which may be writing, inquiry, specialized, or a service project.

## Science Project

Students will research and present an NGSS science standard to their classmates. Science Projects will include presentation skills, research, reading and writing, as well as the creation of a hands-on activity that students will lead classmates through. The rubric and expectations will change depending on the year, teacher, and grade-level of the student.

## Social Studies Project

Students will research and present a strand related to a class topic for social studies projects. This project will include presentation skills, research, reading, and writing. Social studies projects will incorporate elements of the NM State Social Studies Scope, and may also include elements of service learning projects and community engagement.

## Other Projects

**Inquiry Project:** Students will complete a full inquiry (or in some cases multiple full inquiries) culminating in a presentation of their findings and a display of their research.

**Writing Project:** Students are led through a writing project which requires weeks of writing and reading within a particular theme or process in order to eventually create a written project of their own design.

**Specialized Project:** Students work with homeschooling providers to design a project that enables them to engage with a specialized field such as photography, cooking, aeronautics, etc. They will find community mentors to support their engagement with the content in the real world, and will engage in several real-life experiences, compiling research, demonstrations, and a final product of their work.

# QUARTERLY DATA PERIODS AND REPORT CARDS

Family School follows a quarterly grading and reporting cycle within APS. Each Family School narrative report card has a unique purpose within our curriculum, and together, they provide parents with a contextualized picture of their child’s academic skills, social and emotional development, engagement with peers, and opportunities and challenges. These narrative report cards will come in conjunction with Quarterly reporting of an overview of student data, skills, and needs in a Dashboard Report Card.

| October      | December               | March               | May                  |
|--------------|------------------------|---------------------|----------------------|
| Goal Project | Tier II<br>(as needed) | Self-<br>Assessment | Project<br>Portfolio |
| Dashboard 1  | Dashboard 2            | Dashboard 3         | Dashboard 4          |



# REPORT CARDS & CONFERENCES



## GOAL PROJECTS

- For the fall semester, we use Goal Projects to ensure students build momentum in their learning. Students see that they can learn when they apply targeted strategies to their challenges. Teachers begin to differentiate and grow in their knowledge of individual student needs.
- Helps teachers establish Tier I and Tier II interventions to support diverse learners immediately
- Goals are differentiated accordingly to directly address student needs. Students work in small groups or individually to meet tailored goals. Students can have input about the goal, but ultimately the teacher is responsible for choosing goals.
- The report cards will consist of two individualized projects, one in ELA and one in Math, and another that is designed by the teacher around a particular mode or student learning need, which may include social-emotional goals.
- Presented in a conference in October for all students, and with as-needed conferences in December
- Includes assessment data, pre and post-assessment goals, and measurable progress in exposure modes or social-emotional goals



## SELF-ASSESSMENT

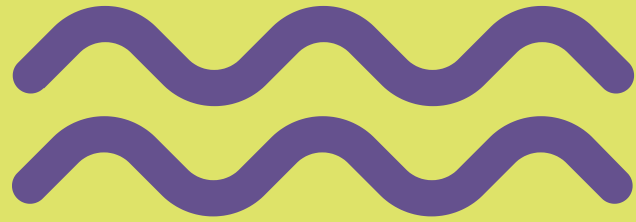
- Students grow in their understanding of themselves as learners, taking responsibility for their learning progress.
- Students evaluate their progress and set goals for themselves.
- The teacher provides students with a structure with which to analyze their learning.
- Teacher and students spend a minimum of 8 weeks implementing that structure, gathering data and work examples.
- Students present a portfolio of their work to their families in a student-led conference.
- The teacher paraphrases the student's presentation into a written report card, .



## PROJECT PORTFOLIO

- Students complete projects throughout the year that demonstrate that they have mastered certain standards at their grade level.
- Students engage in graded presentations of those projects.
- A written description of the project is compiled, and may include elements written by the homeschooling provider who helped the student with the home-based elements of a project.
- The descriptions and grading of the project and the presentation become the final report card.
- Three projects chosen at school or teacher discretion, always including science and social studies, and with a selected third project (inquiry, writing, specialized, etc.).

# FAMILY SCHOOL EVENTS



In Family School, our learning events serve multiple purposes. They are community events, providing time for students, parents, and staff to engage in activities and celebration together. Additionally, each of our unique learning events also provides an opportunity for the presentation of student work or curriculum, and for us to bring community resources and organizations to families.

The **Fall Literacy Fair** is a celebration of reading and writing, and all related community organizations. Each year, we design a new theme around reading and literacy, and provide a huge Used Book Sale to our community.



December's **Art and Poetry Night** is a community art gallery event and silent auction. Student work is on display in every room, including visual artwork and written poetry. Additionally, the event serves as a fundraiser for the Roadrunner Food Bank.

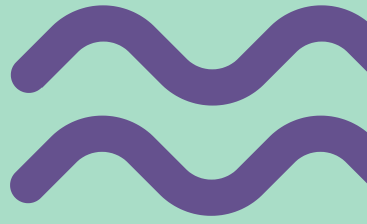


The **Spring Genius Fair** is a community event celebrating student Inquiry Projects and all things STEAM. We bring in community partners in the fields of science, technology, engineering, art, and math. Every student's final Inquiry Project is on display at this event.



# FINE ARTS

The arts are integrated in our classrooms throughout the year  
with different purposes.



## VISUAL ARTS

Classrooms learn techniques in different media, including watercolor, acrylic, clay, polymer, self-portraiture, mixed media, collage, and many other styles of visual arts. Their work may include research about artists, styles, history, periods, and purposes of art. Student art is presented at Art & Poetry.

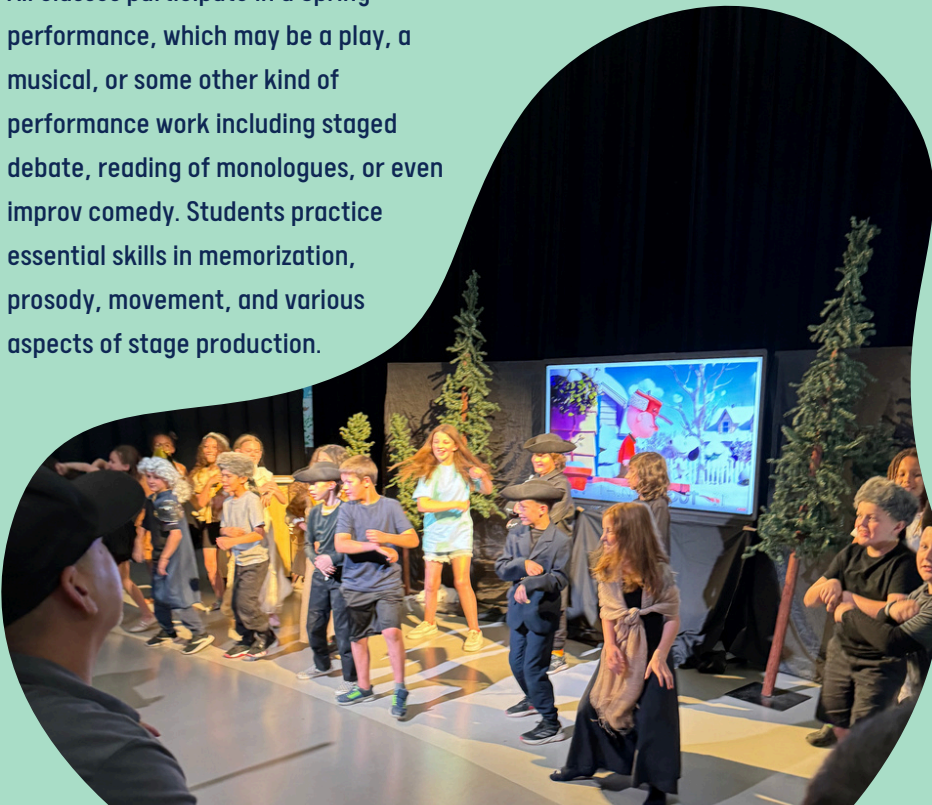


## POETRY

Students read and write poetry in a variety of formal and informal structures, experimenting with various techniques, figurative language, poetic devices, and styles. They will research and mimic published poets and produce original works, many of which may be hung during Art & Poetry, or culminate in a writing project.

## MAY PLAY

All classes participate in a Spring performance, which may be a play, a musical, or some other kind of performance work including staged debate, reading of monologues, or even improv comedy. Students practice essential skills in memorization, prosody, movement, and various aspects of stage production.



# WHY MAY PLAY?

At Coyote Willow, every class is required to participate in a Spring Performance of some kind, which we refer to as “May Play”-- but it may be a play, a musical, a puppet-show, a staged debate, improv comedy, rehearsed speeches, etc.



## Becoming a Confident Public Speaker

It takes a lot of guts to stand up and perform in front of your family, peers, and what may seem like the entire community. Experience with public speaking at a young age gives performers confidence that will be important and beneficial to them for the rest of their lives.

## Strengthening Skills and Independence

Performers acquire skills and gain experience in learning the features of working in an ensemble, back-stage requirements, set-changes, costume-changes, prop organization, etc. In many cases, they also help design the scenes and props.

## Improving Literacy Skills

From reading scripts to memorizing lines to learning to tell a story, young people continually improve their literacy skills while rehearsing and performing in a class production.

## Gaining Critical Thinking and Problem-Solving Skills

Putting on a production of any kind is a group effort and every member of the team must work together to make it happen. Throughout the rehearsal process, the performers will learn to solve challenges as they arise.

Performers will learn to trust and depend on themselves and their cast mates.



# GLOSSARY

# OF TERMS



**Anti-Counting:** The Kindergarten math curriculum which includes mastery of number, numeral, and combinations to 10; building, writing, and reading numbers and numerals from 0-1,000; introduction to the base-ten number system up to 9,999, including regrouping; comparing numbers, classifying numbers as even and odd, and early mental math strategies.

**Art & Poetry:** A celebration of student art and poetry held in mid-December. A school “open house” on a grand scale, Art and Poetry night includes self-guided tours of each class display, a silent auction of student art, a bake sale and student service learning.

**Attitude:** In metacognitive theory, it is understood that attitude affects behavior and that people have some control over their attitude.

**Attention:** In metacognitive theory, an aspect of self-regulation is being aware of and controlling one’s attention level.

**ARI:** The Analytical Reading Inventory is a metric of student fluency and paragraph-level retell, taken three times a year on a leveled passage.

**Base Ten Blocks:** Tactile and visual manipulatives used to reinforce and concretize important mathematical concepts. Base Ten blocks can be used in the teaching of number and place value, addition, subtraction, multiplication, division, fractions, decimals and measurement.

**Belonging Cues:** A set of strategies for students to engage in explicit instruction on effective group participation.

**Brainteaser:** A holistic class exercise meant to expose younger students to new concepts and to challenge older students into fresh ways of thinking and problem solving. Brainteasers provide conceptual context for math and writing skills.

**Brushstrokes:** From the Image Grammar curriculum; a set of writing phrases which enhance student writing including prepositional phrases, infinitives, appositives, absolutes, participials, etc.

**Commitment:** An aspect of metacognitive self-regulation, commitment is a major determinant of student success. Commitment is neither feeling nor inclination – but rather a conscious decision to work hard (or not).

**Community Brain:** It is said that two (or more) heads are often better than one. Used to describe the synergy that can occur in workshop or brainteaser groups, the community brain is also called upon when a student is “stuck” and requests input and fresh perspective from classmates.

**Critical Reframers:** 1) Approaching an issue from different aspects. 2) Another way of asking the same question. 3) Used as a basis to teach a wide variety of thinking skills to improve critical thinking. Critical Reframers (Reframers) are used throughout all subjects and grade levels at Family School. Reframers represent a framework from which students approach problem solving and teachers approach instruction. Reframers represent a common vocabulary and approach used throughout the school by teachers, parents and students. As students or work groups develop an area of study, they are required to look at their assignment from different perspectives by “reframing” the questions, strategies and issues associated with the specific area of study. While not standards in their own right, the activity of reframing questions within various subject areas is included in almost all areas of Family School academic life. It follows that reframing areas of study allows the student to develop “critical thinking” skills, the ability to use logic in researching an academic question.

# GLOSSARY

# OF TERMS



**Dog bone:** A manipulative tool used in anti-counting. A small scroll with a blank grid that children progressively fill in as they stack blocks into groups of ten and then 100s on up to 1,000, the Number Bone is used to teach place value.

**Dictation:** A holistic, integrated educational tool that teaches spelling, capitalization, grammar and punctuation in context and non-fiction reading. The essay/paragraph usually complements a current workshop theme. The students take both a pre -and post-test of the passage within a week's time.

**Exposure Mode:** Family School curriculum that is designed for exploration. These modes are not tested.

**FTO:** 1) Family Teacher Organization (akin to PTA). Functions to raise school funds and provide teacher, student and school support. 2) Many hands make light work.

**Goal Project:** The first two narrative-based report cards and projects that students work on across the fall semester. Each goal project will include 2-3 diverse goals, with specific strategies and outcomes. These inform student differentiation, intervention, and reporting to parents. The Report Card is associated with the acronym GPRC.

**Habits of Mind:** Core behaviors exhibited by successful learners. Behaviors include persistence, questioning, and accuracy. These are monitored through the implementation of a district survey called the Panorama Survey (grades 3-8).

**Hand game:** 1) A major component in anti-counting and in developing "number sense." 2) Not to be confused with "hand jive."

**Homeschooling Log:** A record of homeschooling activities and home schooling hours. In some classrooms, used as an avenue of parent-student/teacher communication and reflection.

**IEP:** Individualized Education Plan devised to service students with special needs.

**Image Grammar:** 1) Book upon which Family School writing curriculum is based and from which the Brushstrokes originate. Available by special order at any locally owned bookstore.

**Inquiry:** A hands on, integrated student- lead process in which students are able to ask, and answer their own question(s) through their own discovery and analysis of the process. Appropriate inquiry topics include anything a young mind might wonder about.

**Inquiry (Genius) Fair:** Students share their Inquiry Projects with their own and other classes. This includes a school-wide celebration of STEAM with community partners.

**Intervention:** Whenever a student is not achieving at the rate we'd expect, they may receive specialized lessons in Math, Reading, and/or Writing which targets their needs. Intervention may be in the gen-ed classroom, or it may be a pull-out with an intervention teacher for small group time. The goal of intervention is to exit.

**iReady/iStation:** Standardized formative assessment measures taken by all students in reading and math. Students in grades K-3 will take iStation reading with monthly monitoring. Students in grades K-2 will use iStation for math as well, while students in grades 3-8 will use iReady for math. iReady, unlike iStation, is taken only three times a year.

# GLOSSARY

# OF TERMS



**Leadership Rotations:** Spring, bi-weekly rotations for the middle school students wherein they work with students of the same grade-level on a differentiated service learning and community engagement project.

**Learning Cycle:** Process – Rehearsal – Performance – Reflection

**Mastery Mode:** Parts of the Family School curriculum in which students must demonstrate mastery before moving on. In Family School, mastery is defined a 85% or higher, with one exception being Sophie, where the emphasis is on improvement, rather than 85%.

**May Play:** The spring performance, undertaken by each class yearly. The spring performance may be a play, but can also be a musical, improv, staged debate, etc. The purpose of May Play is to provide students the opportunity to be a member of a cast, learn lines and movement, work purposefully on diction and projection, and participate in the success of a performance.

**Metacognition:** 1) Being aware of your thinking as you perform specific tasks and then using this awareness to control/choose what you are doing. 2) Components of metacognition include commitment, attitude, effort and attention.

**Mobius:** Student-led math, that looks most like the math you probably did in school. Keeps teachers on their toes because they never know what students will ask next. Utilizing the Sadlier-Oxford curriculum based on Common Core standards.

**MPR / Cafegymatorium:** All purpose space on the east side of the building.

**MSSA/ ASR:** The standards-based assessment that is done by students in grades 3-8 each spring as part of their mandatory, standardized assessment cycles. Students in grades 3-8 will take assessments in Reading and Math, and students in grades 5 and 8 will additionally take Science.

**NRG:** Science. Usually pronounced “energy”. Uses the NGSS Science Standards.

**NFR:** Non-Fiction Reading. Strategies include restate, build on prior knowledge, connect front to back, finger counting, personal connection, notes, etc.

**Number Sense:** You know it when you see it. I know what makes a 10 without needing to count. I know my place values fluently. Etc.

**Open House:** Held throughout the year for families prospecting for a new school or for a new teacher. Parents sign in at the office then go to different classes to observe.

**Over the Edge:** A level one zone strategy that means, “I am lost, I have no idea what is happening, I need help!”

**Parent Academy Classes:** Interesting, enlightening and tremendously encouraging classes offered throughout each school year. There is a fall series of math classes, ongoing Coffee and Curriculum classes on different curriculum, and a yearly school-wide Curriculum Night. Though classes are optional, attendance will save you from weeks (and, in some cases, months) of perplexing bafflement in your home schooling.

# GLOSSARY

# OF TERMS



**Performance Project Portfolio:** The final narrative “report card”. In the PPP, a student, teacher, and in many cases, parents, prepare a portfolio containing performance and explanations of the work done in the main projects of the year, including Science, Social Studies, and optionally Inquiry, Writing, Service, or Specialized.

**Reading Journal:** A reading, writing and thinking tool, the reading journal is a yearly progression of skills developed to ensure comprehension and critical thinking. Beginning with Retelling in the third grade, Reading Journal skills progress to Personal Comment, Writing Technique, Critical Thinking, and Structure and, in the 8th grade, Research.

**Retell:** (see Nonfiction Reading NFR) this is a formal process wherein a student reads closely using the NFR Strategies and then performs a performance restate of the essential ideas of the paragraph, idea for idea, not a memorized recitation of the passage. The purpose of retell is to engage close reading and strategies *before doing the retell*, and to then reflect on comprehension and meaning-making through the identification of what might be missing when the passage is retold. Retell is not memorization. It is typically performed first at clause or sentence-level, and then students grow to paragraph and multi-paragraph levels, with the goal of an 85% performance of the restated content. It is not done on every paragraph or even with every reading.

**Recommitment:** A Family School Rite of spring. Teachers and families decide whether or not to return to Family School the following academic year. A time of reflection and evaluation, the process also facilitates enrollment planning for the next year.

**SAT:** The Student Assistance Team, which represents a formal process of identifying the success of strategies or underlying root causes for student behaviors or performance challenges, which can, with parent partnership, result in district diagnostic testing and may lead to an IEP.

**Self-assessment:** A spring curriculum around metacognition, wherein students collect data on their own learning and present their findings in a conference in the Spring. This culminates in a report card.

**SLANT:** An acronym describing, “what attention looks like.”? Sit up + Lean towards it + Act interested + Nod to indicate interest + Track the teacher.

**Sophie:** The Sophie Experience is an integrated, multi- purpose learning tool. Depending on the classroom, the Sophie Experience varies in its depth of overlapping components. At the very least, the Sophie Experience includes the dictation of a passage that is connected to a classroom unit of study and the pen pal letters to a secret classroom parent. Letters may focus on the dictation topic or on another student project. The dictation studies and the yearlong exchange of letters encourage a real and personal writing experience and put writing mechanics in a meaningful context.

**Workshop:** Students work together in heterogeneous teams to explore issues related to the year’s theme. Integrated, Project-Based Learning curriculum that includes science and social studies standards.

**Zone or Zone Strategies:** A set of strategies for students to use in order to facilitate their own learning.

1. Level One strategies help students maintain their attention
2. Level Two strategies help students thinking critically during the lesson
3. Level Three strategies help students teach themselves and reach beyond the lesson



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