

# ADVANCED ACADEMICS NEWSLETTER

VOLUME 1

CCT  
STRATEGY  
HIGHLIGHT

PMI  
(Plus, Minus,  
Interesting)

PMI (Plus, Minus, Interesting) is one of many critical and creative thinking (CCT) strategies that can be used to stretch and challenge students' thinking. PMI encourages students to look beyond the polarity of "yes or no," "wrong or right," "my answer or your answer." Its goal is to develop independent thinkers who consider a range of ideas and possibilities to see beyond the obvious.

+	-
fun	cold
normal	socks dirty
keeps school clean	hurt
healthy	trip/fall
looking new	messy entrance
comfortable	stinky!
	unsafe
	safety drills
Interesting	
Does it help custodians?	
Try at Tuckahoe?	
Why take shoes off?	
What is the back up plan?	

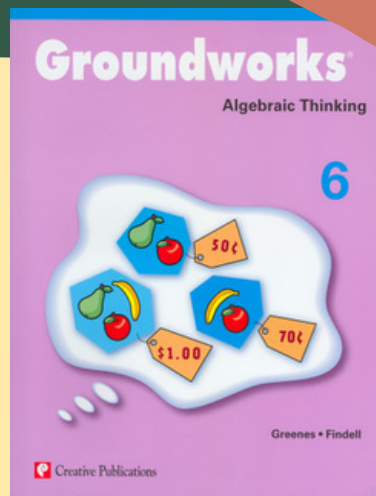


1st graders used PMI to think about schools in Iceland. They were asked to use this strategy to analyze the image (above, right) of the entrance of an Icelandic elementary school. Students had extensive conversations about the pluses, minuses, and interesting parts of taking shoes off at school and walking around in your socks!



# MATH RESOURCES:

## Groundworks



**Groundworks: Algebraic Thinking** helps students develop their reasoning skills in algebra by providing innovative problems that connect arithmetic and algebra.

The six big ideas in **Groundworks: Algebraic Thinking** are:

- Representation
- Proportional Reasoning
- Balance
- Variable
- Function
- Inductive Reasoning

**Text Organization:** Each text in **Groundworks** contains 15 different problem pages. A set refers to a specific type of mathematical reasoning problem. Each set contains six different problems for ample practice reinforcement.

### Order, Please! ★ 1

Use every number on the sign once in each sentence.  
Use the rules for the order of operations to make each sentence true.



1. \_\_\_\_\_ + \_\_\_\_\_ × \_\_\_\_\_ + \_\_\_\_\_ = 16
2. \_\_\_\_\_ × ( \_\_\_\_\_ + \_\_\_\_\_ ) - \_\_\_\_\_ = 21
3. \_\_\_\_\_ × \_\_\_\_\_ ÷ \_\_\_\_\_ - \_\_\_\_\_ = 7
4. ( \_\_\_\_\_ - \_\_\_\_\_ ) × \_\_\_\_\_ + \_\_\_\_\_ = 7

### Mystery Number ★ 5

Use the clues.

What is the two-digit mystery number?

Clues

- 1 It is between 60 and 90.
- 2 The sum of the digits is 14.
- 3 The digits are not the same.
- 4 The tens digit is not 6.

1. The mystery number is \_\_\_\_\_ .

2. Tell how you know. \_\_\_\_\_



## 5th Grade Sample

This extends the order of operations standard.

## 2nd Grade Sample

This extends the comparing numbers standard.

# MATH RESOURCES:

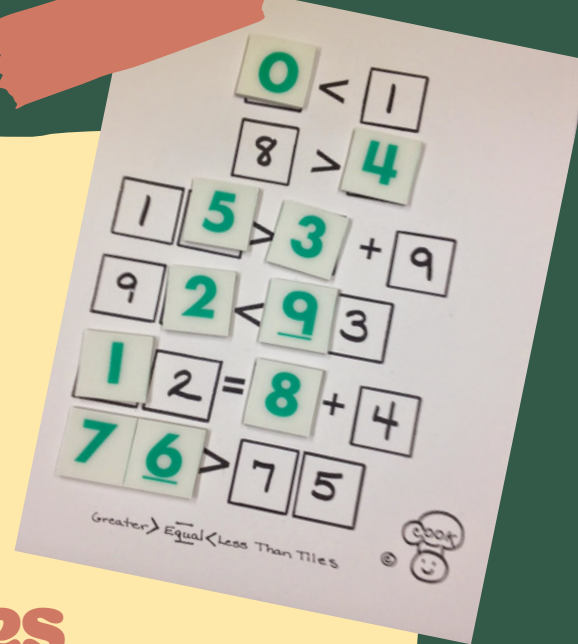
## Marcy Cook Math Tiles

### Who is Marcy Cook?

Marcy Cook is an experienced educator and math specialist. She's taught across grade levels and all over the world. She's created engaging, hands-on activities that challenge students and promote higher level thinking in math.

### How does it work?

Students are given tiles with the digits 0 - 9. They use these tiles to solve open-ended problems, ranging from addition and subtraction to place value and algebra.



3

$$\begin{array}{r} \square \\ + \square \\ \hline 6 \end{array} + \begin{array}{r} \square \\ + \square \\ \hline 12 \end{array} + \begin{array}{r} \square \\ + \square \\ \hline 2 \end{array}$$

$$\square + \square = 14$$

$$\square + \square = 11$$

$$\square + 4 = 7$$

Add An Addend Tiles

Total 20

1

$\triangle = \square$     $\bullet = \square$     $\star = \square$

---

$\square \star = 1 \square$    Extra tile

$\square \triangle = 1 \square$

$\square \star = 2 \square$

Mobile Math Tiles III

### 1st - 2nd Sample

Can you use the digits 0 - 9 to solve this task card?

### 4th - 5th Sample

Use digits 0 - 9 to balance this mobile.

# ELA RESOURCES: SEM-R

## What is SEM-R?

SEM-R stands for Schoolwide Enrichment Model - Reading. It is an enrichment-based reading program that is designed to:

- Stimulate interest in and enjoyment of reading
- Promote and develop higher reading achievement
- Improve self-regulation and automaticity in reading
- Encourage students to select high-interest books that are slightly to moderately above their current reading levels
- Create independent, lifelong readers

## Character

How does the personality of one character contribute to his or her success or failure in the story?

Who *narrates* the book? Why do you think the author made this choice?

Tell about two events in the story that the author used to portray the main character's personality. What did you learn about the character from these parts of the book?

What advice would you give the main character if he or she was starting as a new student at your school? Whom do you think he or she would sit with at lunch?

Project SEM-R (Elementary)  
University of Connecticut  
www.gifted.uconn.edu

C-7

## Sample SEM-R Bookmark

### Historical Fiction

After reading this book, what questions do you have about the historical setting and/or the people of this time and place?

Did you feel more connections with the real or fictional characters in this book? Why?

How would you check the accuracy of the historical information in this book? What resources might you use?

Choose some part of daily life mentioned in this book, such as food or clothing or transportation. How would you explain to a character from the book how this

### Plot

What are the main problems so far for the characters in the book? At this point in the story, which is the biggest or most important problem? Why?

If you could only choose one event from the story to tell a friend, what event would you choose? Do you think you could convince your friend to read the book based only on this one event?

Tell about a point in the story at which you didn't want to put the book down. What made that moment so interesting?

## How do we use it with students?

We use SEM-R bookmarks to support students in their independent reading. When students are independently reading or in a book club, the bookmarks help prompt them to extend their comprehension of the plot, characters, setting, etc. using higher-order questions.

## Sample SEM-R Bookmarks

SEM-R Bookmarks can be used with any independent book.

The bookmarks focus on different elements of literature and different genres.

# AT HOME IDEAS

## Project Zero



PROJECT ZERO



**“PZ's Mission:** Project Zero’s mission is to understand and nurture human potentials –such as learning, thinking, ethics, intelligence and creativity –in all human beings. Their research examines the nature of such potentials, the contexts and conditions in which they develop, and the practices that support their flourishing.”

### What is a thinking routine?

A thinking routine is a set of questions or a brief sequence of steps used to scaffold and support student thinking. PZ researchers designed thinking routines to deepen students’ thinking and to help make that thinking “visible.” Thinking routines help to reveal students’ thinking

CORE THINKING ROUTINES

INTRODUCING & EXPLORING IDEAS

DIGGING DEEPER INTO IDEAS

SYNTHESIZING & ORGANIZING IDEAS

INVESTIGATING OBJECTS AND SYSTEMS

PERSPECTIVE-TAKING

CONSIDERING CONTROVERSIES, DILEMMAS, AND PERSPECTIVES

GENERATING POSSIBILITIES AND ANALOGIES

EXPLORING ART, IMAGES, AND OBJECTS

GLOBAL THINKING

## Thinking Routine Categories



# Project Zero Continued

How can I use Project Zero Thinking Routines at home?

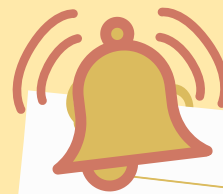
Explore PZ Thinking Routines at home through their [Thinking Routines Toolkit](#). They have categorized a variety of routines in 10 different categories. Each thinking routine comes with a PDF guide on how to facilitate the routine and the purpose of the routine.



The PZ Thinking Routines could be used after visiting a museum, going to the park, putting groceries away, etc. Try the “Investigating Objects & Systems” category if you are unsure of where to start.

## Example from 2nd Grade

Second Grade used the PZ Thinking Routine “See, Think, Wonder” to explore Iceland’s landscape. They then imagined how people live in Iceland considering the geography. They wrapped up the thinking routine by writing letters to students in Iceland.



## Upcoming Events

- Dec. 14 - 9:30 -10:15 AM  
Parent Coffee with Ms. Weisz  
in the multipurpose room.  
Cheryl McCullough, AATD  
Supervisor, will join us!

## Connect:

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