



# *Elementary* Curriculum, Instruction & Assessment

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West Windsor-Plainsboro Regional School District



## Curriculum and our Strategic Goals:

We believe that every individual has intrinsic worth, that embracing diversity enriches and empowers our community, and that people reach their full potential when encouraged to believe it is possible. Therefore, building upon our tradition of excellence, we will guide and support our students' growth, empowering them to value their individual learning journeys

### **Goal 1**

Understanding that all students have diverse needs, backgrounds, and approaches to learning, we will integrate tools and structures to appropriately challenge and enable students to realize their full potential.

### **Goal 2**

Embracing a rapidly changing world, we will empower learners to assume active roles in their communities, to face and engage global challenges and to contribute proactively toward a more peaceful, just, inclusive, and secure world.

### **Goal 3**

Recognizing that children need to balance physical, social, emotional and academic needs, we will maintain a supportive culture and build structures for the health, safety, and well-being of the Whole Child.

# Every Child, Whole Child, Global Child

# Curriculum and our Strategic Goals:

## Goal 4

West Windsor-Plainsboro Regional School District will cultivate a diverse and inclusive community where members of every race, sexual orientation, gender, gender identity, ability, religion, socio-economic class, ethnicity, and national origin are welcomed, valued, respected and celebrated.

EQUITY and INCLUSIVITY

Assessment

# Purpose

- ▶ To understand what students have learned.
- ▶ To make instructional decisions to help students grow.

# *Types of Assessments*

## Assessments **FOR** Learning

Quizzes, tests, observations, class discussions

## Assessments **OF** Learning

Grades, assessments like NWEA Map & NJSLA

# Snapshot of (some) Assessments

<u>Gr.</u>	<u>Assessment</u>	<u>Timeframe</u>
K-9	NWEA MAP	Fall, Winter, Spring
K-1	NWEA MAP Fluency	Fall, Winter, Spring
2	CogAT	Winter
K-12	ACCESS for ELL's	Spring
k-9	NJSLA	Spring



doing, knowing, and sense making

*Mathematics*



# What has changed?



Timed fact tests  
Teacher telling how to do it  
One right answer  
Isolated practice  
Long worksheets  
Memorizing steps  
“I’m not a math person.”

Fluency strategies & practice  
Inquiry/strategies that fit my brain  
Multiple entry points  
Cooperative group and partner work  
Manipulatives  
Conceptual understanding  
Growth mindset

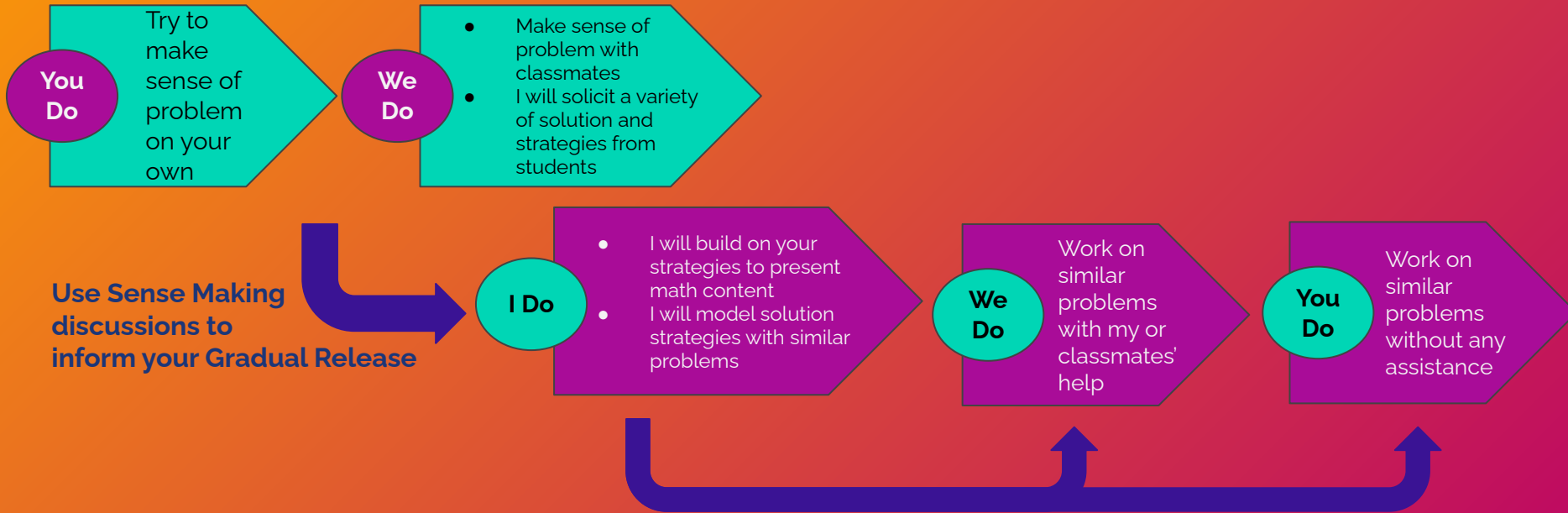
## Shared Vision: *Math Equity Statement*

ALL learners should have access to rigorous, high-level mathematical content in an environment where risk-taking, deep conceptual understanding, and growth mindset are the norm.

doers, knowers, sense makers of mathematics

# Start with *Sense Making*

## Sense Making - Number Sense Routine (or Calendar Math)



# Math Workshop Structures

- ▶ Number Sense Routines
- ▶ Mini-lesson and/or Guided Math Groups
- ▶ Rich Tasks or Center Activities
- ▶ Reflection

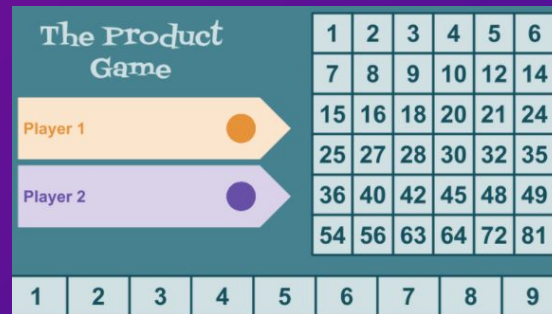
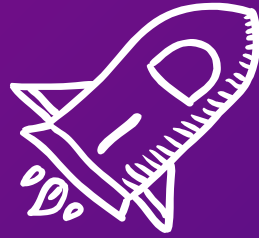
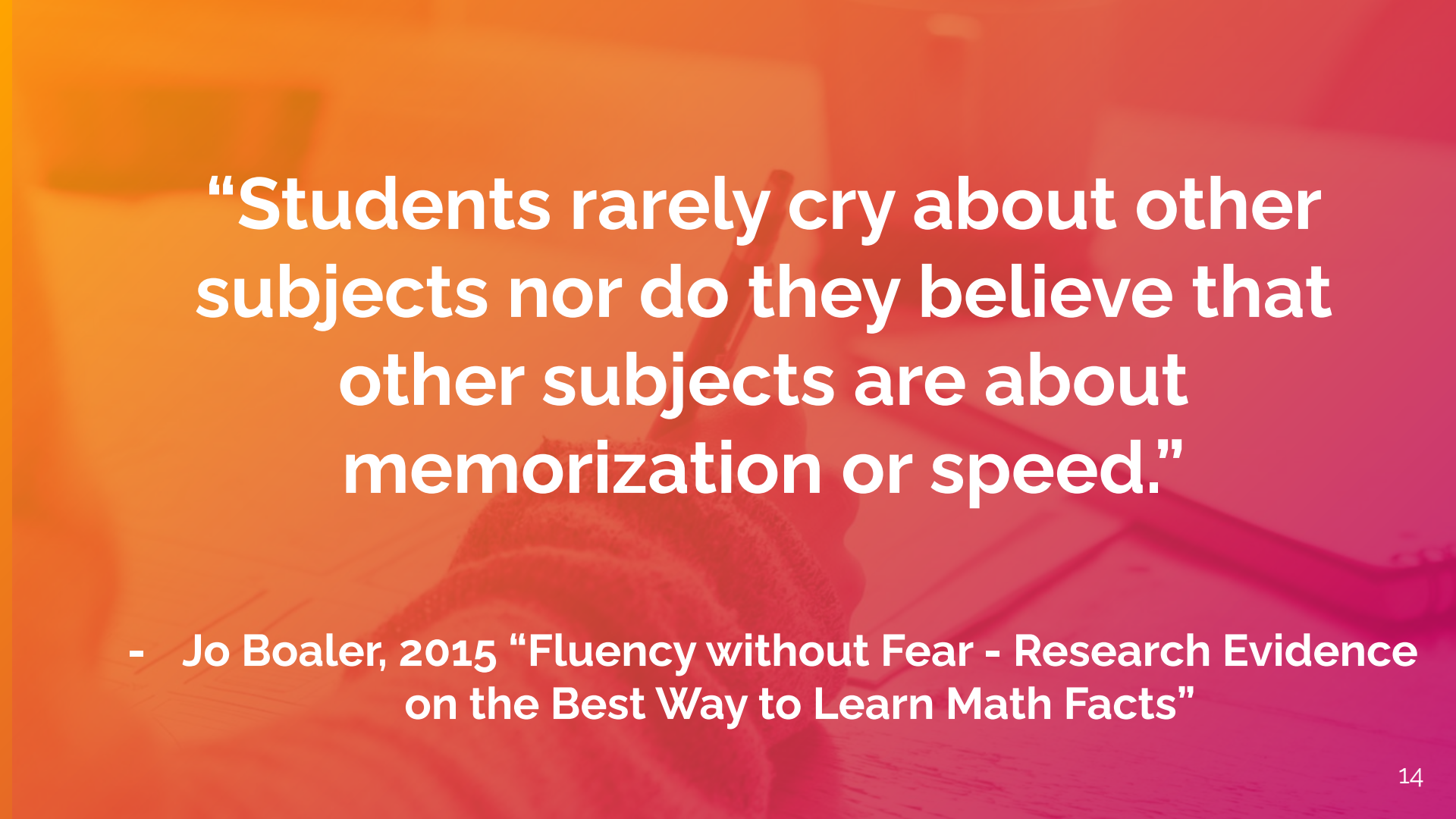


Image: Theresa Wills



*Misconception:*

Kids don't practice their basic facts anymore.



**“Students rarely cry about other subjects nor do they believe that other subjects are about memorization or speed.”**

- **Jo Boaler, 2015 “Fluency without Fear - Research Evidence on the Best Way to Learn Math Facts”**

## Phases of Fluency

Phase 1  
Counting

Counts or  
counts on  
with objects  
or mentally

Phase 2  
Deriving

Reasoning  
strategies  
based on  
known facts

Phase 3  
Mastery

Efficient  
production  
of answers



# What is fluency?

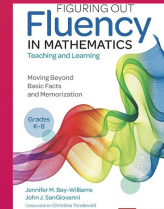
**Efficiency:** Solving a procedure in a reasonable amount of time by selecting an appropriate strategy and readily implementing that strategy

**Flexibility:** Knowing multiple procedures and applying or adapting strategies to solve procedural problems

(Baroody & Dowker, 2003; Star, 2005 as cited by Bay-Williams & SanGiovanni, 2021, p.3).

**Accuracy:** Correctly solving a procedure

(Bay-Williams & SanGiovanni, 2021, p. 3)



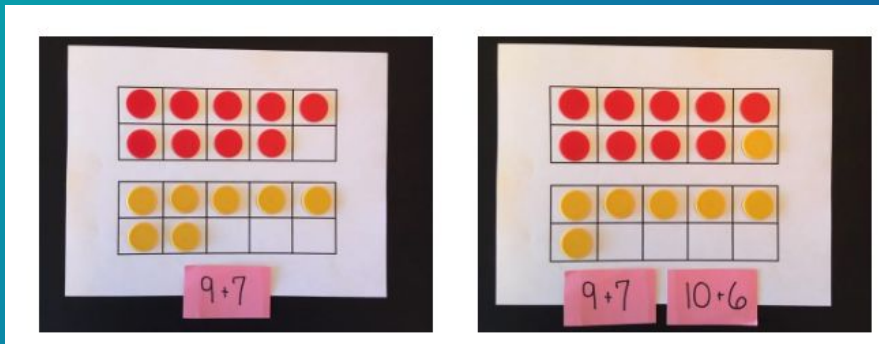


# Example: *Make a Ten Strategy*

## Basic Fact Example

$$7 + 9$$

$$6 + 10 = 16$$



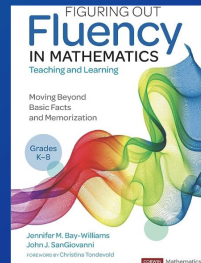
## Extensions to Other Types of Numbers

$$97 + 35$$

$$100 + 32 = 132$$

$$3.9 + 1.4$$

$$4.0 + 1.3 = 5.3$$





12 X 25

# Fluency Games

## ADDITION TIC-TAC-TOE GAME BOARD, COMPLETED

Reproducible 5

Copy the game board as needed to play the game (one game board for each game).

2	3	4	5	6
7	8	9	10	11
12	13	14	15	16
17	18	19	20	21
22	23	24	25	26

1 2 3 4 5 6 7 8 9 10 11 12 13

## CLOSE TO 20 RECORDING SHEETS

Reproducible 8

Copy the recording sheet as needed to play the game  
(each player should have one sheet for five rounds of play).

NAME \_\_\_\_\_

ROUND 1: \_\_\_\_\_ + \_\_\_\_\_ + \_\_\_\_\_ = \_\_\_\_\_ SCORE \_\_\_\_\_

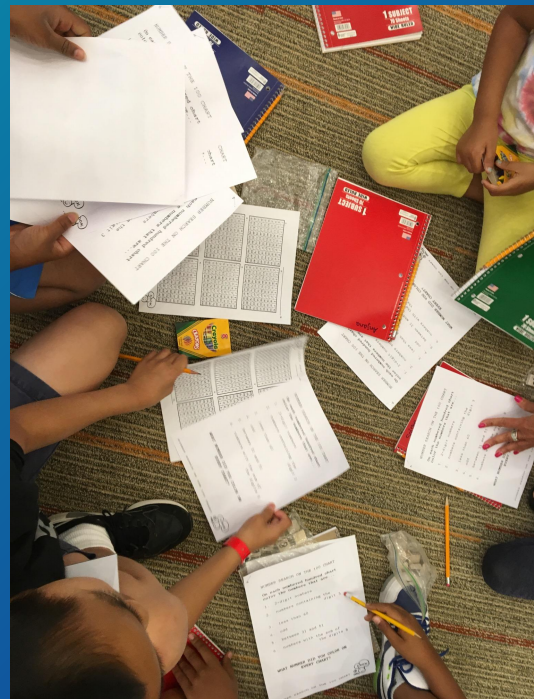
ROUND 2: \_\_\_\_\_ + \_\_\_\_\_ + \_\_\_\_\_ = \_\_\_\_\_ \_\_\_\_\_

ROUND 3: \_\_\_\_\_ + \_\_\_\_\_ + \_\_\_\_\_ = \_\_\_\_\_ \_\_\_\_\_

ROUND 4: \_\_\_\_\_ + \_\_\_\_\_ + \_\_\_\_\_ = \_\_\_\_\_ \_\_\_\_\_

ROUND 5: \_\_\_\_\_ + \_\_\_\_\_ + \_\_\_\_\_ = \_\_\_\_\_ \_\_\_\_\_

TOTAL SCORE \_\_\_\_\_

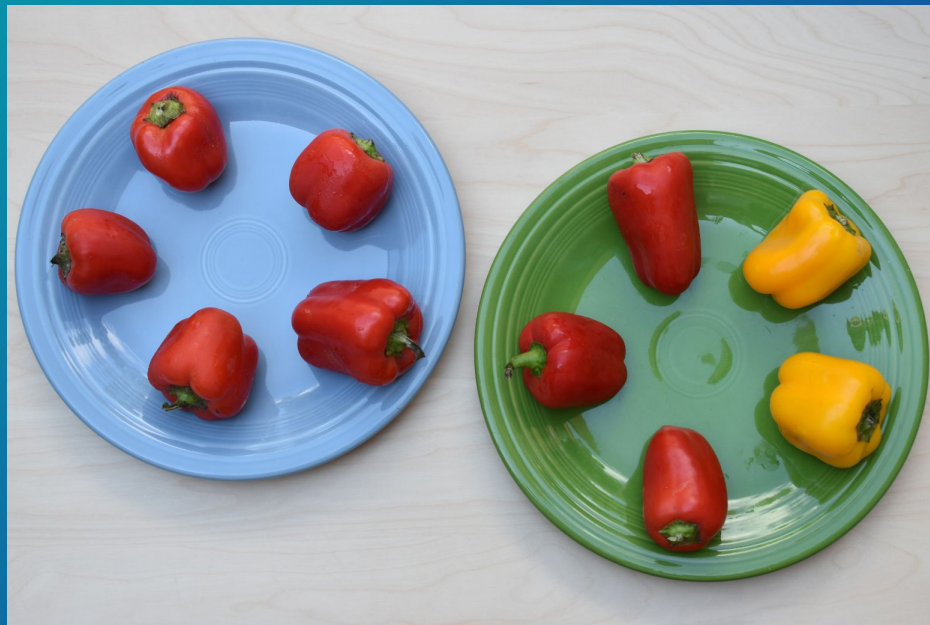


Why all of this?



**Number Sense** is the foundation for all higher-level mathematics. We are more mathematically confident when we understand numbers.

What do you notice?  
What do you wonder?





73 and 48 are **BIG**  
numbers when...

 Which One Doesn't Belong?

21	63
17	84



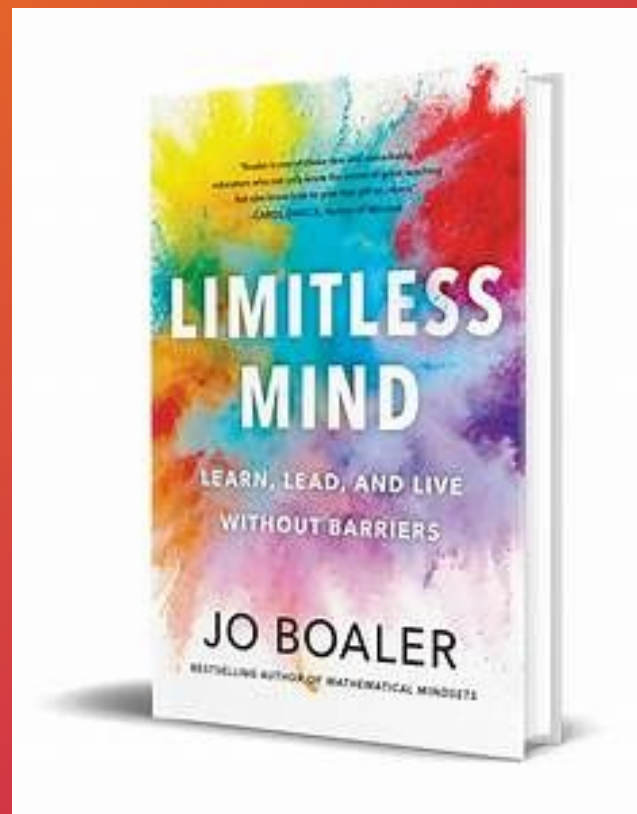
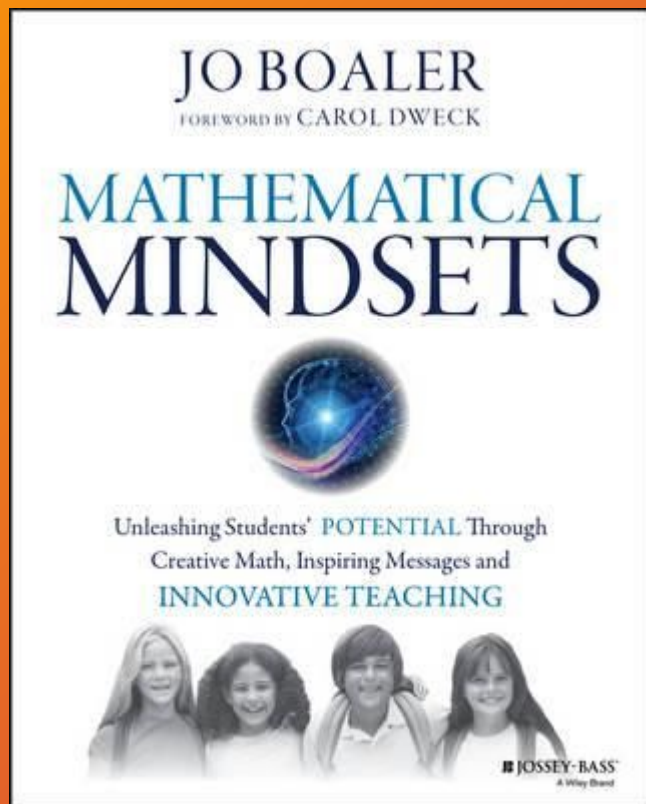
- ▶ About how many full day equivalents would someone have spent brushing their teeth between the day they started elementary school and the day they ended?
- ▶ Jim brushes his teeth for 2 minutes, 3 times a day. How many minutes does he spend brushing his teeth in a year (365 days)?

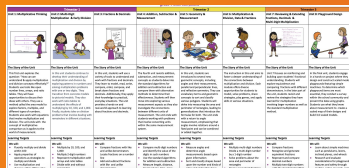
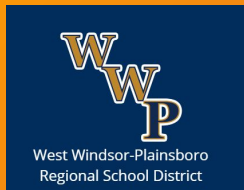


## Progression of *Early Numbers & Counting*



<https://gfletchy.com/progression-videos/>





## Talk to your kids about math when:

- cooking
- getting groceries
- going for a walk

## Ask your children about their math:

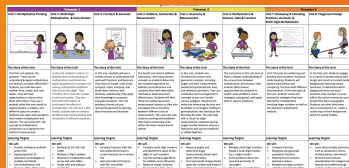
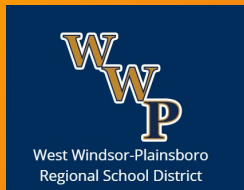
What do you notice?

How do you know?

How did you figure that out?

Do you see any patterns?

## Resources Links from Previous Slide



### **WW-P Elementary Math Page**

[http://www.ww-p.org/departments/Mathematics/elementary\\_school\\_math](http://www.ww-p.org/departments/Mathematics/elementary_school_math)



### **Math Learning Center Pages (Bridges)**

<https://www.mathlearningcenter.org/families>

<https://mathathome.mathlearningcenter.org/>



### **Bedtime Math Links**

<https://bedtimemath.org/get-up-and-move/>



### **New Jersey Student Learning Standards for Math**

<https://www.nj.gov/education/standards/math/index.shtml>

Phonics, Reading and Writing Workshop

*Literacy*





# Scarborough's Reading Rope

## Language Comprehension **LC**

**Background Knowledge**  
facts, concepts, etc.

**Vocabulary**  
breadth, precision, links, etc.

**Language Structures**  
syntax, semantics, etc.

**Verbal Reasoning**  
inference, metaphor, etc.

**Literacy Knowledge**  
print concepts, genres, etc.

## Word Recognition **D**

**Phonological Awareness**  
syllables, phonemes, etc.

**Decoding**  
alphabetic principle,  
letter-sound correspondences

**Sight Recognition**  
of familiar words

INCREASINGLY STRATEGIC

Skilled  
Reading **RC**

INCREASINGLY AUTOMATIC

$$\text{LC} \times \text{D} = \text{RC} \quad \text{Fluent word recognition and comprehension.}$$

*This interpretation of the Reading Rope incorporates Gough & Tunmer's (1986) Simple View of Reading.*

## Teaching Literacy in WW-P



## Phonics (K-2) and Word Study (3-5)

Phonics → decoding and spelling

**'geography'**

syllables:

**ge-og-ra-phy**

phonemes/graphemes within syllables:

**g** **e** **o** **g** **r** **a** **ph** **y**

giant  
gel  
gentle  
magic  
germ

phone  
phonics  
sphere  
photo  
prophet

**Teaching points**

<g> spelling of the sound /j/

<ph> (Greek) spelling for the sound /f/

Morphology → vocabulary, comprehension & spelling

**'geography'**

**definition:** the study of the earth, its atmosphere and human activity related to the earth

morphemes:

**geo - graph - y**

means 'earth' from  
Greek 'ge-o'

geographer  
geopolitics  
geophysics  
geothermal

means 'to write' from  
Greek 'graphia'

graph  
graphics  
photograph  
biography

means 'the  
activity of' from  
Greek and Latin

history  
victory

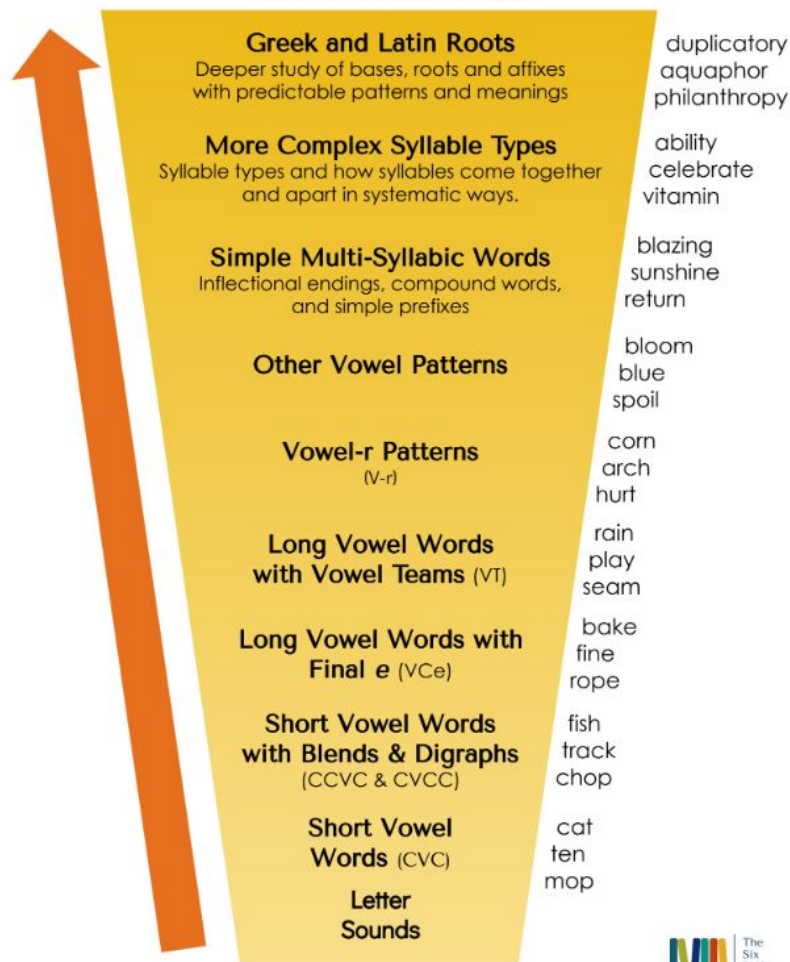
**Teaching points**

Meaning of the morphemes 'geo' and 'graph' which are Greek in origin and words related to these morphemes

# Phonics to Word Study

## Sample Phonics Skills Progression

by Jan Burkins and Kari Yates

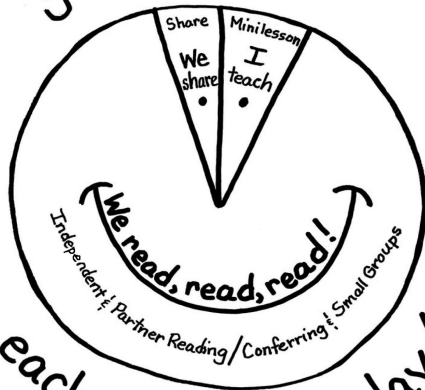






# Teaching Literacy in W/W-P

Reading Workshop  
goes this way



each and every day!  
Yay!

## Reading and Writing Workshop Structures (40-60 minutes)

- Mini-lesson (5-15 minutes)
- Student Reading/Writing Time with Conferring and Small Groups (20-30 minutes)
- Mid-Workshop Teaching Point (2-5mins)
- Teaching Share/Partner/Book Clubs (2-10 minutes)



## Zooming in to what Workshop Model Teaching Really looks like....

### Workshop Model Teaching

- Whole Group Direct Instruction
- Guided Practice
- Small Group Instruction
- Time for Independent Practice

# Spiraling through the Grades - Reading

K-Becoming Avid Readers

1st- Meeting Characters and Learning Lessons

2nd- Amping Up Reading Power

3rd- Character Studies

4th - Interpreting Characters

5th - Interpretation Book Clubs

# Spiraling through the Grades - Writing

K- Persuasive Writing of All Kinds

1st- Writing Reviews

2nd- Writing About Reading

3rd- Changing the World: Persuasive Speeches,  
Petitions and Editorials

4th - Boxes and Bullets: Persuasive Essays

5th - Research Based Argument Essay

# Supporting your child

**How can you support your child's growth as a reader?**

- Read **TO** your child
- Read **WITH** your child
- Have your child read to you
- **TALK** about the book (avoid the question-and-answer approach)
- Tell stories (family stories are a great way to end the day ...)
- Write notes to your child (leave them on the counter in the morning, tuck them into backpacks or lunch boxes)

## Supporting your child

Supporting your child's writerly life:

- Give them notebooks
- Talk about the different types of writing you do.
- Have them help you write the grocery list, notes to family, daily gratitude journal etc.
- Have conversations around their writing- what are they trying to do, or make the reader feel?
- Talk about the what you notice authors doing in their writing.



# *A Message from Dr. Lee McDonald*

**Deputy Superintendent of Schools**



# 🗨️ Parent University - Benefit of Youth Sports

A mountain of evidence now documents the physical, mental, social, emotional, cognitive and academic benefits that flow to youth whose bodies are in motion. Learn more about the positive impact on a child's life through participation in youth sports. Hear from a panel of community leaders about how sports have impacted local youth and how your child can be involved.

***Tuesday February 13th 7pm via Zoom***



# Resources & Links

[West Windsor Recreation](#)

[Plainsboro Recreation](#)

[West Windsor Little League Baseball](#)

[West Windsor Youth Soccer](#)

# thanks!

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- ▷ Presentation template by [SlidesCarnival](#)
- ▷ Photographs by [Unsplash](#)