# The Year of Math

**April Board Meeting** 





The objective of this presentation is to inform about the rationale behind adopting the Bluebonnet Learning Curriculum, highlighting how its evidence-based, personalized approach will enhance student outcomes. By integrating adaptive learning technologies, aligned standards, and real-time data insights, we aim to foster student engagement, improve mathematical proficiency, and equip our teachers with the tools to support diverse learning needs, ultimately driving academic success across all grade levels.

## **Math RBIS**

Balance Conceptual & Procedural

Depth of key concepts

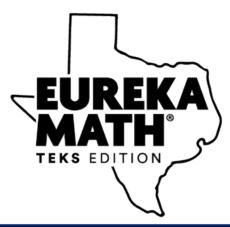
Coherence of Key Concepts

Productive Struggle

## #TheYearOfMath



Bluebonnet Learning are **state-developed instructional materials** that provide teachers with the tools to foster student success. Developed using the **latest cognitive science**, Bluebonnet Learning instructional materials cover 100% of the Texas Essential Knowledge and Skills (TEKS) and provide a **full suite of resources including scope and sequence**, **daily lesson plans**, **and student materials**. All Bluebonnet Learning instructional materials are designed to be high-quality, suitable, and grade-level appropriate.



# CARNEGIE



# Elementary Mathematics



# Timeline for Adoption of New Math Curriculum

This timeline outlines the process for reviewing and adopting a new math curriculum, ensuring teachers are involved in the decision-making process and that the selected curriculum aligns with the highest standards for instructional quality.

## December 2024

- □ Vendors were contacted and scheduled for teacher presentations in January and February 2025.
- ☐ The selected vendors are on the high-quality instructional materials list from the State Board of Education (SBOE).
- ☐ Rubrics were created for teachers to follow during the presentations.
- ☐ Math committees were selected.

## January 2025

- ☐ January 16, 2025: iReady Mathematics presentation for elementary teachers.
- ☐ January 22, 2025: Stemscopes presentation for elementary teachers.
- ☐ January 28, 2025: Eureka/Bluebonnet Learning presentation for elementary teachers.

# Timeline for Adoption of New Math Curriculum

## February 2025

2/11/15: Elementary ISs and the **Elementary IO vetted the top math** curriculums and planned lessons using them. The components that were analyzed consisted of concept development and rigor, progress monitoring, mathematical fluency, problem solving, and productive struggle



## March 2025:

- Math comparison findings were presented to elementary teachers for review and feedback.
- For the 2025-2026 school year, teachers were informed that the new curriculum will be Bluebonnet Learning. They were introduced to the materials they will receive, along with details on implementation and ongoing year-long support.



## For Teachers



**Teacher Editions** 



**Digital Platform** 



**Assessment Packs** 



**Implementation Support & Training** PD & Coaching

## For Students



Student Workbooks



Hands-On Manipulatives



**Family Support** Resources

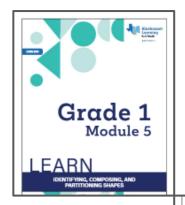


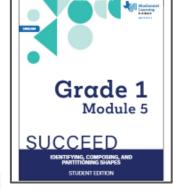


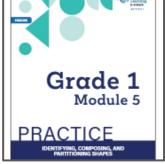
# **Curriculum Components**

## 3 Student Books

- ★ Learn: Application problems, problem sets and Exit Tickets
- ★ Practice: Helps students build math fluency
- ★ Succeed: Additional problem sets and homework helpers



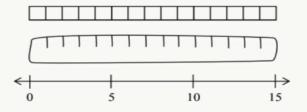




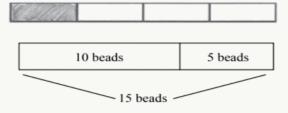


# **Consistent Models**

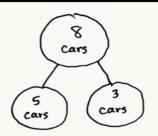
## **NUMBER LINES**



## STRIP DIAGRAMS



## **NUMBER BONDS**

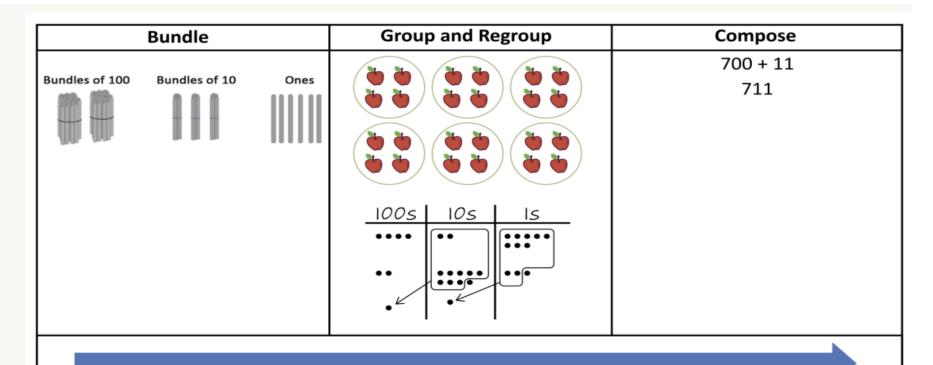


## ARRAYS





## **Concrete – Representational – Abstract Approach**



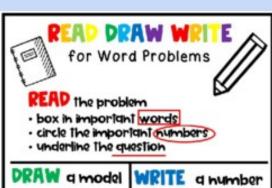
Concrete-Representational-Abstract Continuum



## **Problem Solving Plan**

## **Problem Solving Plan: Eureka**

Read-Draw-Write: Read the problem, draw and label, write an equation, and write a word sentence.



# and label

- · Can I draw something?
- What can I label?
- · What do I see?
- · What can I learn from my drawing?

# sentence

Examples: 7 + 2 = 9 8 4 = 4

3 X 3 = 9 12 + 4 = 3

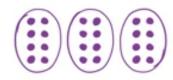
a word sentence

Use the Read-Draw-Write process to solve the problem.

2. Miss Wong displays the 24 pictures her students made in art class on a bulletin board. She puts 8 pictures in each row.

How many rows of pictures does Miss Wong make?

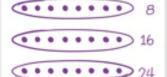




24 + 8 = 3

Miss Wong makes 3 rows of pictures.





24 + 8 = 3

Miss Wong makes





K-2	3-5
TEKS:	TEKS: 5.2A Place Value & Decimals



Mathematics Rubric 2024-2025								
Scorin 0 1					ng 2			
Indicator	STEMScope	es	Eureka					
Concept Development and Rigor								
Materials sequence concepts from concrete to representational to abstract (CRA) as is appropriate for the grade-level and content.	0 1 2		0	1	2	•		
Materials are built around quality tasks that address content at the appropriate level of rigor and complexity.	0 1 2		0	1	2			
Materials include a cohesive, year-long plan for students to develop <b>fluency</b> in an integrated way.	0 1 2		0	1	2			
Materials support students in the development and use of mathematical language (vocabulary).	0 1 2		0	E	iZa	rio		
Materials provide opportunities for students to apply	0 1 2		Sa	1	4			

Mathematics Rubric 2024-2025



# Secondary Mathematics



# Timeline for Adoption of New Math Curriculum

This timeline outlines the process for reviewing and adopting a new math curriculum, ensuring teachers are involved in the decisionmaking process and that the selected curriculum aligns with the highest standards for instructional quality.

## December 2024

- Vendors were contacted and scheduled for teacher presentations in January and February 2025.
- The selected vendors are on the high-quality instructional materials list from the State Board of **Education (SBOE).**
- Rubrics were created for teachers to follow during the presentations.
- Math committees were selected.

## January 2025

- January 21, 2025: iReady **Mathematics** presentation for secondary teachers.
- January 22, 2025: Stemscopes presentation for secondary teachers.



# Timeline for Adoption of New Math Curriculum

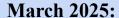
## February 2025

2/4/25: Bluebonnet/Carnegie presentation for secondary math teachers

2/5/2025: Agile Mind presentation for secondary math teachers

2/18/2025: Kiddom math presentation

for secondary teachers



- IS and teachers vetted Bluebonnet/Carnegie curriculum
- For the 2025-2026 school year, teachers were informed that the new curriculum will be Bluebonnet Learning. They were introduced to the materials they will receive, along with details on implementation and ongoing year-long support.





# CARNEGIE LEARNING

# **Curriculum Components**

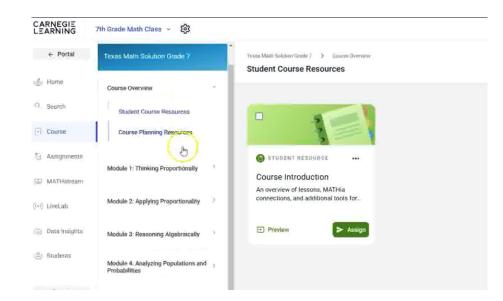
















# All 6th grade students will be in Advanced Mathematics for the 2025-2026 school-year



# Engage

## consistency allo you and your st to internalize the lesson progressi **Develop** features of each are noted.

# **Demonstrate**



the objectives.

(1) Objectives

Objectives are sta

for each lesson to

you take ownersh

Each lesson begin statement connec you have learned question to pond Return to this que

the end of this les



**LESSON STRUCT** 

Each lesson of t

course has the

same structure.

# 5

## Talk the Talk

In the prev slope form equation c

## **WORK**

To write the slop

- First.
- Next. the ta
- · Then. into t (2, 6),
- (x, y). Finall no va

The equ

This linear form. The where m is

1. Solve tl equatio each fo

## Say What?

You have learned about two forms of a linear equation: the slope-intercept form, y = mx + b, and the point-slope form,  $y-y_1=m(x-x_1).$ 

- 1. What information can you determine about each line by looking at the structure of the equation?
  - a.  $y = \frac{3}{5}x 4$

b. y - 6 = 2(x + 1)

c. v + 4 = 2(x - 0)

d.  $y = -\frac{2}{7}x$ 

e. y + 5 = -(x - 4)

f. y = 19

2. Create a context that represents a linear relationship that passes through the point (2, 56) and has an increasing slope. Then, write the equation of the line in point-slope form and slope-intercept form.



(6) Talk the Talk

opportunity to reflect the main ideas of the lesson.

· Be honest with your

Talk the Talk gives you

- · Ask questions to clarify anything you don't understand.
- Show what you know

Don't forget to revisit question posed on the lesson opening page to gauge your understand

## DEMONSTRATE

Talk the Talk

- Graphic Organizer
- Presentation
- Generalization
- Writing Task
- Procedure
- Application

# **Problem Solving Model**

## Understanding the Problem-Solving Model



## Notice | Wonder

Understand the situation by asking these questions.

- · What do I notice?
- · What do I wonder?
- . How do I analyze the given information to identify what is important?
- Do I have enough information to formulate a plan and determine a solution?



## Organize | Mathematize

Devise a plan for your mathematical approach by asking these questions.

- · What mathematical relationships exist between this problem and similar problems I have solved?
- · What plan or strategy can I use to solve this problem?
- How can I efficiently solve this problem?
- · How can I organize, record, and communicate my mathematics?



## Predict | Analyze

Carry out your plan to determine a solution. Then, ask yourself the following questions.

- · Did I display my work using multiple representations?
- . Did I explain my reasoning in terms of the problem situation?
- . Did I communicate the strategy used to determine the solution?
- Did I justify my mathematical argument clearly using precise mathematical language?
- Can I use my mathematical reasoning to make any predictions?



Look back at your work and ask these questions.

- · Does my solution clearly and completely answer the original question/problem?
- Is my solution reasonable?
- Does my solution make sense in terms of the problem situation?
- Can I solve the problem using a different strategy? Would another strategy be more efficient?
- Can I justify my solution?



## Report

As you share your mathematical reasoning with others ask these questions.

- · Did you use multiple representations to represent your mathematics?
- Did you justify your mathematical reasoning? Can others understand my process and solution?

## The Problem-Solving Model Graphic Organizer



Understand the Problem



Devise a Plan



Carry Out the Plan





# **Instructional Design**

## Guiding principles:

- Active learning
- Collaborative discourse
- Personalized learning
- Problem solving
- Seeing connections
- Reflecting and communicating

## **Learning Together**

On **Learning Together** days, you spend time facilitating active learning so that students build their mathematical understanding and confidence in sharing ideas, listening to one another, and learning together. The Student Edition is a consumable resource that contains the student-facing materials for each lesson.



## STUDENT EDITION

I am a record of student thinking, reasoning, and problem solving.

My lessons allow students to build new knowledge based upon prior knowledge and experiences, apply math to real-world situations, and learn together in a collaborative classroom.

My purpose is to create mathematical thinkers who are active learners that participate in class.

## **Learning Individually**

On **Learning Individually** days, you spend time on targeted instruction to meet the needs of each student. Skills Practice offers students

the opportunity to engage with problems aligned to each lesson's essential ideas. It also provides opportunities for interleaved practice, which encourages students to flexibly move between individual skills, enhancing connections between concepts to promote long-term learning.



## SKILLS PRACTICE

I am targeted practice of each lesson's skills, mathematical concepts, and applications for each topic in the student edition.

My purpose is to provide additional problem sets for teachers to assign as needed for differentiated instruction, enrichment, and extension.



# **Support**

# **Carnegie Implementation Training**

- **★** Day 1 (\$3500) The Carnegie Learning Way
- **★** Day 2 (\$3500) The Teacher's Perspective
- **★** Ongoing online support per 9 weeks (in talks)

# **PEureka Implementation Trains**



- **★** 2-3 Implementation Trainings
- ★ Additional Training-\$3900.00
- **★** Online Support

## **%** All Hands on Deck

- Training for teachers, instructional team, & administrators
- Prioritizing Planning PLCs
  - Lesson internalization
  - o "The How"
- Focused Walkthroughs
- Accountability for all

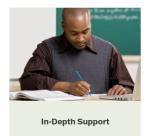






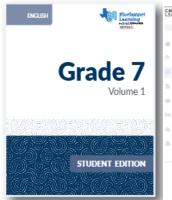




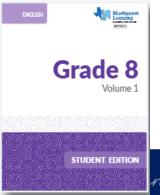


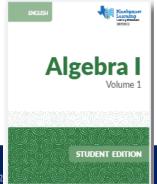


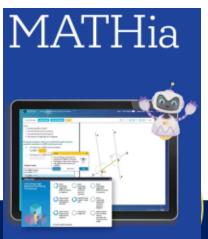
# CARNEGIE LEARNING













# Thank you! Questions?

