



# Illustrative Math

## In Kindergarten & Grade 1



Parent Webinar - September 29, 2022

# Why does mathematics instruction evolve?

- National Council of Teachers of Mathematics Curriculum and Evaluation Standards for Mathematics - 1989
- The Future of Jobs Report - World Economics Forum - 2018, 2020



# What is Illustrative Math?



Illustrative Math is a Standards and problem-based curriculum designed to address content and practice standards to foster learning for all students.

- Mathematical understanding is the outcome of the problem solving experience.
  - It is a deliberate shift from the “I do - You do” model.
- *Problem-based* models build on instruction.
- Direct instruction, independent practice, centers, and discussions are highly engaging and purposeful.
- Students learn math by *doing* the math!
- Students still develop strong procedural fluency and automaticity.



IM K-5  
MATH



# “Doing” Mathematics

Doing mathematics means learning mathematical concepts and procedures by engaging in mathematical practices such as:

- ❖ Making sense of problems while using solid math facts
- ❖ Reasoning abstractly and quantitatively
- ❖ Making arguments and critiquing the reasoning of others
- ❖ Modeling with mathematics
- ❖ Making appropriate use of tools to “show what they know” and confirm accuracy

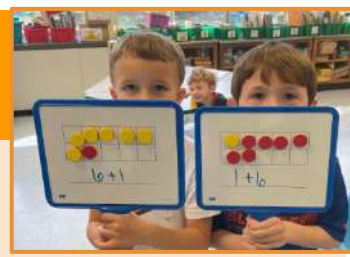


Rather than simply imitating their teachers, students “do the math”, and teachers highlight the best of students’ different approaches.



Teachers also correct misconceptions and redirect when students need to adjust their thinking.

# Lesson Structure & Routines



- Each unit starts with an exploration of the lesson's main mathematical concept.
- The unit's opening lessons provide an accessible entry point for all students and offer teachers the opportunity to observe students' prior understandings.



A typical lesson has three phases:

1. a warm-up
2. one or more instructional activities
3. the lesson synthesis



# Center Work



Students collaborate in engaging math centers to practice and apply skills taught within the lessons. Centers are embedded throughout the resource and are revisited throughout the course of the school year to build fluency and automaticity.

## Centers offer students:

- the gift of time for students to explore in the big mathematical ideas of the unit
- meaningful contexts for engaging fluency development
- opportunities for teachers to observe students in the act of doing the math
- joyful, purposeful opportunities for engaging practice with important mathematics skills, soft skills, fluency, and math discourse.
- a forum for teachers to gather important diagnostic information about what students know and are able to do and coach in to help them.





# Home School Connection



- Teachers' weekly newsletters
- [Illustrative Mathematics resources on the district website](#)
- In-person *Parent Mathematics Night*: October 26 at 6:30pm, at Hemlock Primary School.

