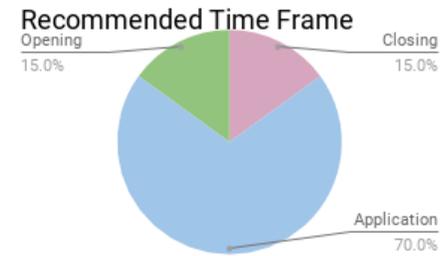


TLA K-7 Math Instructional Framework



K-5 Math block (60 minutes per day) in - *Must* include each day:

- √ Whole group Lessons
- √ Math Message & Mental Math
- √ Partner/Small Group Work
- √ Independent Math Practice*
- √ Summarizing/Making Connections

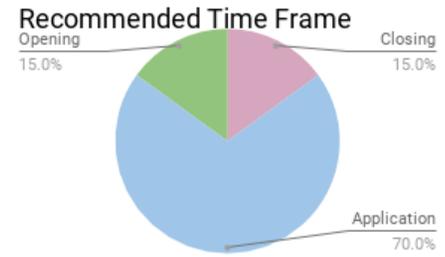
**Daily routines and independent math practice must occur every day, but can occur at a time outside of the “official” math block.*

Math Message & Mental Math

Quick, whole class instruction using appropriate cooperative and collaborative groups that give students an opportunity for daily mathematical practice (approximately five to seven minutes) which targets the grade level understandings of the math standards documents.

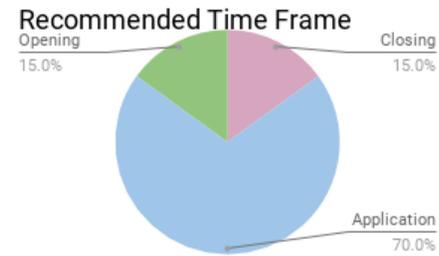
What is the teacher doing?	What are the students doing?
Teacher uses purposeful questions to assess and advance students’ reasoning and sense making about important mathematical ideas and relationships.	Students analyze, comment on, compare, and share their thinking about mathematics through learning - focused "talk".
Teacher establishes clear goals for the mathematics that students are learning, situates goals within learning progressions, and uses the goals to guide instructional decisions	Students confidently engage in complex mathematical tasks, make sense of quantities and their relationships in problem situations.
Teacher engages students in solving and discussing tasks that promote mathematical reasoning and problem solving and allows multiple entry points and varied solution strategies.	Students apply the mathematics they know to solve problems arising in everyday life, society, and the workplace.

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Teacher builds fluency with procedures on a foundation of conceptual understanding so that students, over time, become skillful in using procedures flexibly as they solve contextual and mathematical problems.	Students apply what they know, are comfortable making assumptions and approximations to simplify a complicated situation, realizing that these may need revision later.
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Examples: Students would be practicing addition skills, subtraction skills, (or whatever numeracy skill is targeted at the grade level and is indicative of the need for regular practice based on student performance data).



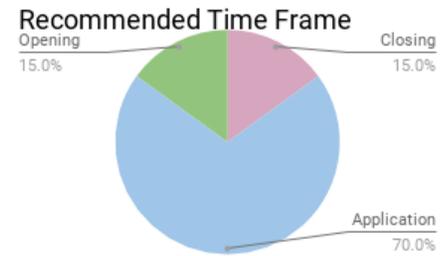
TLA K-7 Math Instructional Framework

Whole Group Instruction

Whole class direct explicit instruction which is just beyond the students' mathematical abilities, reaches higher levels of DOK and which leads to students developing their numeracy, problem-solving, and reasoning skills.

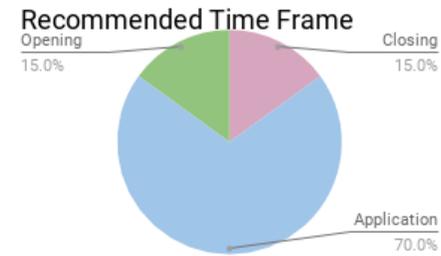
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Teacher engages students in making connections among mathematical representations to deepen understanding of mathematics concepts and procedures and as tools for problem solving.	Students compare the effectiveness of two plausible arguments, distinguish correct logic or reasoning and can identify and explain flawed logic.
Teacher facilitates discourse among students to build shared understanding of mathematical ideas by analyzing and comparing student approaches and arguments.	Students listen or read the arguments of others, decide whether they make sense, and ask useful questions to clarify or improve the arguments.
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TLA K-7 Math Instructional Framework



skillful in using procedures flexibly as they solve contextual and mathematical problems.	situation, realizing that these may need revision later.
Teacher consistently provides students, individually and collectively, with opportunities and supports to engage in productive struggle as they grapple with mathematical ideas and relationships.	Students consider the available tools when solving a mathematical problem.
Teacher uses evidence of student thinking to assess progress toward mathematical understanding and to adjust instruction continually in ways that support and extend learning.	Students look closely to discern a pattern or structure.
	Students notice if calculations are repeated, and look both for general methods and for shortcuts.

TLA K-7 Math Instructional Framework

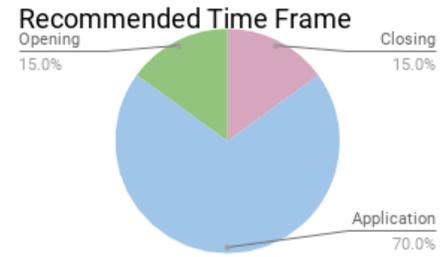


Independent Math Practice

Students pursuing their own numeracy, reasoning, and problem-solving skills at their independent level with individualized goals, based ongoing formative assessment.

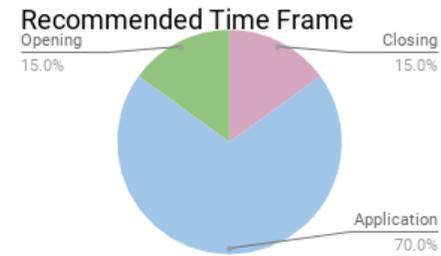
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<p>Teacher uses purposeful questions to assess and advance students' reasoning and sense making about important mathematical ideas and relationships.</p>	<p>Students apply the mathematics they know to solve problems arising in everyday life, society, and the workplace.</p>
<p>Teacher builds fluency with procedures on a foundation of conceptual understanding so that students, over time, become skillful in using procedures flexibly as they solve contextual and mathematical problems.</p>	<p>Students apply what they know, are comfortable making assumptions and approximations to simplify a complicated situation, realizing that these may need revision later.</p>
<p>Teacher consistently provides students, individually and collectively, with opportunities and supports to engage in productive struggle as they grapple with mathematical ideas and relationships.</p>	<p>Students consider the available tools when solving a mathematical problem.</p>

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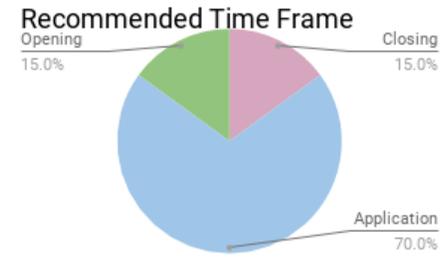


Focus Group Instruction

Small instructional group, based on similar mathematical ability levels, working on a particular skill or strategy, based on ongoing formative assessment.

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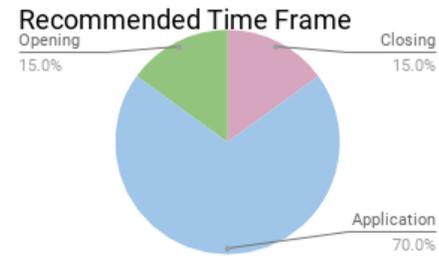
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Teacher consistently provides students, individually and collectively, with opportunities and supports to engage in productive struggle as they grapple with mathematical ideas and relationships.	Students consider the available tools when solving a mathematical problem.

*Students not in focus group instruction are engaged in purposeful mathematical strategies. i.e., partner/small group work, independent math practice, numeracy study, etc.

Partner or Small Group Work

Students work cooperatively or collaboratively to complete the assigned tasks associated with the lesson.

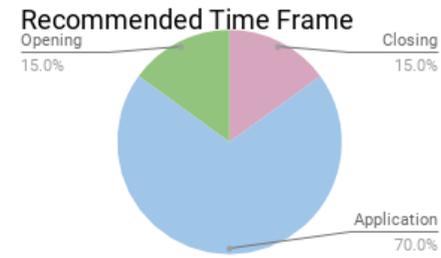
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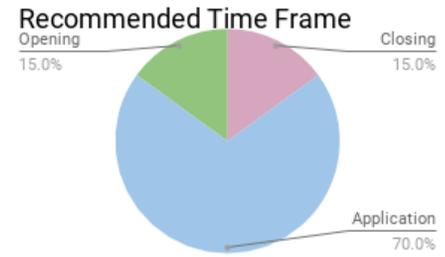


Summary/Making Connections

Teacher summarizes the lesson including learning targets, activities, formative assessments, and direct instruction to ensure that all students can summarize what they did, why they did it, and to what degree learning took place in the lesson.

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