



Revised ALN Windowpanes

Guide to Windowpane Structure



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General Box Structure



General Box Structure K-5



Box A - Distributed Practice	Box B - Number Sense
Provides students with opportunities for distributed practice of the previous grade levels' high leverage concept(s). *In Kindergarten Box A is an additional opportunity to practice additional standards similar to Box H.	Provides opportunities for students to explore number conventions, patterns and relationships with different kinds of numbers across grades.
Box C - Exploring Critical Models	Box D - Grade Level HLC
Focuses on making sense of, comparing or creating critical models with shifts in complexity and number ranges as the year progresses.	Explores grade appropriate problems and contexts with a heavy emphasis on solving word problems of varying problem types with flexibility.



General Box Structure K-5



Box E - Grade Level HLC	Box F - Grade Level HLC
Explores grade appropriate problems while considering critical grade appropriate strategies.	Explores grade appropriate problems while considering critical grade appropriate strategies.
Box G - Exploring Critical Models	Box H - Additional Standards
Focuses on making sense of, comparing or creating critical models with shifts in complexity and number ranges as the year progresses.	Provides students with opportunities to engage with measurement, fractions and data standards across various contexts as is grade appropriate.

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Thin Sliced Big Ideas

Kindergarten



- **Understand and use number values and sequences to 20.**
- **Use 1 to 1 correspondence**
- **Compare quantities**

Set 1 #1-6	Set 2 #7-12	Set 3 #13-18	Set 4 #19-24	Set 5 #25-30
Counting, cardinality and stable order Comparing quantities 1:1 Within 5	Counting, cardinality and stable order Comparing quantities 1:1 Within 10	Composing and decomposing number Within 10	Counting, cardinality and stable order, comparing quantities within 20	Composing and decomposing with 20

First Grade



- **Understand and use number values and sequences to 120**
- **Add and subtract numbers within 100 using place value understanding**

Set 1 #1-6	Set 2 #7-12	Set 3 #13-18	Set 4 #19-24	Set 5 #25-30
<i>Number:</i> Composing and decomposing within 20 <i>Add/Subtract:</i> Flexibly operating within 5	<i>Number:</i> within 50 <i>Add/Subtract:</i> flexibly operating within 10	<i>Number:</i> within 100 <i>Add/Subtract:</i> Flexibly operating within 30	<i>Number:</i> within 120 <i>Add/Subtract:</i> Flexibly operating within 50	<i>Number:</i> within 101 - 120 <i>Add/subtract:</i> Flexibly operating within 100

Second Grade



- **Understand and use number values and sequences to 1,000**
- **Add and subtract accurately, flexibly, efficiently, and strategically within 1,000 using place value understanding**

Set 1 #1-6	Set 2 #7-12	Set 3 #13-18	Set 4 #19-24	Set 5 #25-30
Number: Within 220 Add/Subtract: flexibly operating within 100	Number: Composing and decomposing within within 120 (without operating) Add/subtract: Flexibly operating within 100	Number: Within 500 Add/Subtract: flexibly operating within 300	Number: Within 1000 Add/Subtract: flexibly operating within 500	Number: Within 1000 Add/Subtract: Flexibly operating within 1000

Third Grade



- **Multiply and divide numbers within 100**

Set 1 #1-6	Set 2 #7-12	Set 3 #13-18	Set 4 #19-24	Set 5 #25-30
Expanding understanding of unitizing: units 2s, 5s, 10s	Expanding understanding of unitizing: units 4s and 8s	Expanding understanding of unitizing: units 3s and 6s	Decompose and recompose factors (distributive property) - units 7s and 9s	Decompose and recompose factors (extend understanding of distributive property)

Fourth Grade



- **Multiply and divide numbers within 1,000**

Set 1 #1-6	Set 2 #7-12	Set 3 #13-18	Set 4 #19-24	Set 5 #25-30
Decompose and recompose factors (extend understanding of distributive property) within 200	Decompose and recompose factors using benchmark numbers (1s, 10s, 100s) within 1000	Decompose and recompose based on known multiplication facts and base 10 understanding within 1,000. One factor or divisor is single digit	Decompose and recompose based on known multiplication facts and base 10 understanding within 1,000.	Flexibly decompose factors to multiply and divide within 1000.

Fifth Grade



- **Operate with fractions using visual representations**

Set 1 #1-6	Set 2 #7-12	Set 3 #13-18	Set 4 #19-24	Set 5 #25-30
Fraction multiplication (one factor is a whole number) Adding and subtracting fraction with like denominators	Make sense of fractions as division Adding and subtracting fraction with like and related denominators	Modeling multiplication and division of fractions Adding and subtracting fractions with unlike denominators	Modeling multiplication and division of fractions Relationship between addition and subtraction of fractions	Flexibly operate with fractions

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Box Details



Kindergarten

Set 1, #1-6	Set 2, #7-12	Set 3, #13-18	Set 4, #19-24	Set 5, #25-30
Box A triangles	Box A rectangles and squares	Box A circles	Box A find and count shapes	Box A how many sides or how many corners
Box B number writing 0-5	Box B number writing 1, 4, 7	Box B number writing 6, 8, 9	Box B how many (teen numbers on ten frames)	Box B how many (teen numbers on ten frames)
Box C match fingers to dots 0-5	Box C match fingers to dots 0-10	Box C matching quantities 1-5	Box C matching fingers to dots 6-9	Box C match quantities to numerals (7-10)
Box D count and write how many 0-5	Box D count and write how many 0-10	Box D add more dots to make 11-15	Box D cross out the group with more or fewer	Box D cross out the group with more or fewer
Box E write the missing number on number path 1-5	Box E write the missing number on number path 1-10	Box E write the missing number on number path 1-10	Box E write the missing number on number path 7-20	Box E write the missing number on number path 6-21
Box F color quantity on a five frame	Box F color quantity on a five frame (five and some more)	Box F cross out the group with more (quantities 1-10)	Box F order four nonsequential numbers	Box F order six nonsequential numbers
Box G match five frame to numeral 1-5	Box G match five frame to numeral 6-9	Box G color quantities on five frame (five and some more)	Box G count and write how many (teen numbers)	Box G count and write how many (teen numbers)
Box H circle the group with more or draw more	Box H circle the group with fewer or draw fewer	Box H circle the taller object or draw something taller	Box H circle the taller or shorter object or draw something taller/shorter	Box H sort objects



First Grade

Set 1, #1-6	Set 2, #7-12	Set 3, #13-18	Set 4, #19-24	Set 5, #25-30
Box A How many dots? (within 11)	Box A How many? (within 20)	Box A How many (dots on a single ten strip)	Box A Circle a teen number total	Box A Circle a teen number total
Box B Teen number on ten frames	Box B One fewer and one more with 2 digit #s	Box B +1 & -1, +10 and -10 with two digit #s	Box B How many dots? (On ten frames and bead racks, within 120)	Box B Draw a picture to represent a value (101-120)
Box C How many? (within 10)	Box C How many? (within 50)	Box C How many? (within 100)	Box C Cross out the model with more or fewer	Box C How many (90-120)
Box D What # comes before, after or next	Box D Interpreting a pictograph and drawing shapes	Box D Number paths within 100 (counting by ones or tens)	Box D Number paths by ones or tens or order non-sequential #s (within 120)	Box D Complete the equation (within 20)
Box E Number paths within 20 or decomposing # within 10	Box E Number paths within 100 (counting by ones or tens)	Box E Number paths by ones or order non- sequential #s	Box E Complete the equation (within 20)	Box E +1 and -1, +10 and -10 in equation form (three digit numbers)
Box F Compare which has more or order non-sequential #s within 20	Box F Number paths by ones or order non- sequential #s	Box F Compare sets more and fewer or make two digit #s different ways	Box F +1 and -1, +10 and -10 in equation form	Box F Solve subtraction equations (two digit # and remove some tens)
Box G Complete the equation or match the equation and model (within 10)	Box G Compare sets more and fewer or make teen #s two different ways	Box G How many (teen numbers)	Box G How many dots (teen numbers on ten strips)	Box G Solve for missing addend to make 100
Box H Categorize objects or draw shapes with 3 or 4 sides	Box H How many (within 20) on ten frames and bead racks	Box H Interpret pictograph and partition shapes for sharing	Box H Measure with cubes or identify image of one half	Box H Tell time to hour and half hour or identify image of one fourth



Second Grade				
Set 1, #1-6	Set 2, #7-12	Set 3, #13-18	Set 4, #19-24	Set 5, #25-30
Box A How many dots and how many more or fewer dots	Box A How many dots and how many more	Box A Solve subtraction equations (within 100)	Box A Solve addition equations (within 100)	Box A Solve addition equations (within 100)
Box B Find image with more or fewer and make a number in 2 ways	Box B Find model or # with more or fewer and make a number in 2 ways	Box B Base ten understanding problems and evaluating expression	Box B Base ten understanding problems and ordering non-sequential three digit #s	Box B Fill in a number to make an equality or inequality true
Box C Draw a model to show a number with certain # of tens or ones	Box C Draw a model to show a number with certain # of tens or ones	Box C Draw a model to represent an addition or subtraction equation	Box C Interpret number line and write in missing values	Box C Circle subtraction models that show a given difference
Box D Total unknown and change unknown word problems	Box D Change unknown and both addend unknown word problems	Box D Missing addend and compare word problems	Box D Compare word problems, bigger or smaller unknown	Box D Mixture of different types of word problems
Box E Fill in #s on number path or in +1/-1 and +10/-10 charts	Box E Fill in #s on number path or in +1/-1 and +10/-10 charts	Box E Fill in the missing #s or the missing midpoint on a number path	Box E Compare word problems, bigger or smaller unknown	Box E Mixture of different types of word problems
Box F Relational thinking- using known facts to help solve other facts	Box F Make 10 or make 100 from a given number	Box F Make 10, 100, or 1000 from a given number	Box F Solve related addition and subtraction equations	Box F Finish solving an addition or subtraction problem that has already been started
Box G Write a number sentence to match the model	Box G Write a number sentence to match the model	Box G Find the underlined part of a # or equation in a model	Box G Find the underlined part of an equation in models	Box G Find the underlined part of an equation in models
Box H Draw shapes, count money, and interpret a graph	Box H Find shapes, count money, and interpret a graph	Box H Partition shapes, count money, and interpret a graph	Box H Partition shapes and count money	Box H Partition shapes, tell time, and count money

Third Grade



Set 1, #1-6	Set 2, #7-12	Set 3, #13-18	Set 4, #19-24	Set 5, #25-30
Box A Decompose three digit #s, comparing three digit numbers, base ten puzzles	Box A Solve subtraction equations within 200	Box A Solve subtraction equations within 200 (add-up strategy)	Box A Find the underlined part of an equation in models, solve partial products within a model	Box A Solve related addition and subtraction equations
Box B Identifying missing numbers on a number line	Box B Place a given number accurately on an open number line	Box B Place a given number accurately on an open number line	Box B Number lines, ordering numbers, finding differences	Box B Complete the equality or inequality statements so they are true
Box C Draw a model to match the context or expression	Box C Create an equal groups or array model	Box C Interpreting an area model	Box C Represent a given model with an equation	Box C Interpreting area models
Box D Equal groups or equal rows word problems	Box D Sharing (partitive) division word problems (group size unknown)	Box D Interpret the quotient in quotitive division word problems (# of groups unknown)	Box D Division word problems, organizing playing cards into equal rows and columns	Box D Mixture of multiplication and division word problems
Box E How many? (with a model)	Box E Quotitive division word problems (# of groups unknown)	Box E Interpret the quotient in partitive division word problems (group size unknown)	Box E Solve related multiplication and division equations, area models	Box E How many square units are shaded on a 10 by 10 grid
Box F How many groups of 5, 2 or 10? (with model)	Box F Skip counting on a number line	Box F Skip count, draw a related model	Box F How many: (with a model)	Box F Interpret the someone else's work
Box G Write an equation to match the model	Box G Circle models with the same product, model groups of tens	Box G Circle the models that show a given expression or product	Box G Compare two different models with the same product	Box G Model and solve division equations
Box H Interpret a scaled bar graph, partition shapes	Box H Fractions (one half, one fourth, one eighth), calculating perimeter	Box H Model fractions on rectangle and number line, interpret pictograph	Box H Label area models (length, width, area), model fractions, proving equivalence	Box H More with fractions and area/perimeter calculations

Fourth Grade



Set 1, #1-6	Set 2, #7-12	Set 3, #13-18	Set 4, #19-24	Set 5, #25-30
Box A Partition shapes equally to make fractional pieces	Box A Modeling fractions on number lines and fraction bars	Box A Interpret and model fractions in a set model or area model	Box A Compare fractions word problems and contexts	Box A Fraction foundations and equivalence
Box B Solve related addition and subtraction equations	Box B Solve related addition, subtraction, and multiplication equations	Box B Evaluate equations (true or false), complete the equation to make it true	Box B Solve related multiplication and division equations	Box B Solve related multiplication and division equations
Box C Matching models to numbers and equations	Box C Partitioning arrays and area models to show distributive property	Box C Open area model and fractions on a number line	Box C Model decimal fractions and decimal #s on number lines and 100 grids	Box C Model and order decimal #s on number lines and 100 grids
Box D Word problems with varying operations	Box D Word problems with varying operations	Box D Word problems with varying operations	Box D Word problems with varying operations	Box D Word problems with varying operations
Box E Relational thinking as a strategy with multiplication facts	Box E Using commutative, associative, and distributive property when multiplying	Box E Use multiplication to solve division problem, solve related division problems	Box E Division word problems, making sense of a remainder	Box E Multiplication and division contexts
Box F Skip counts and multiplying by 10	Box F Skip counts and multiplying by 10 and 100	Box F Skip count, Solve related multiplication problems	Box F Multiplicative fact strategies, ratio tables	Box F Evaluate equations, evaluate other student's strategies
Box G Making sense of arrays, equal groups and area models	Box G Making sense of arrays, equal groups and area models	Box G Making sense of ratio tables, number lines and area models	Box G Solving for larger products using area model	Box G Area models and ratio tables
Box H Label fraction models, compare fractions, calculate perimeter	Box H Label fraction models, compare fractions, calculate perimeter and area	Box H Adding fractions with like denominators, lines of symmetry	Box H Angles, compare fractions and decimal numbers	Box H Measurement conversions, comparing decimal #s

Fifth Grade



Set 1, #1-6	Set 2, #7-12	Set 3, #13-18	Set 4, #19-24	Set 5, #25-30
Box A Whole number operations, multiples	Box A Whole number operations, multiples	Box A Whole number operations	Box A Whole number operations	Box A Whole number operations, factors and multiples
Box B Multiplicative compare word problems	Box B Multiplicative or additive compare word problems	Box B Multiplicative or additive compare word problems	Box B Multiplicative or additive compare word problems	Box B Multiplicative or additive compare word problems
Box C Area model puzzles	Box C Strategies for multiplying with larger products	Box C Using tables to solve problems, place numbers on number line	Box C Using tables to solve problems, place numbers on number line, fraction multiplication on number line	Box C Modeling fraction operations, using ratio tables
Box D Addition and subtraction word problems with fractions with like denominators	Box D Division word problems and fraction addition word problems with unlike denominators	Box D Multiplication whole #s and fractions in context, addition of fractions in context	Box D Multiplication, addition, or subtraction of fractions in context	Box D Operating with fractions in context
Box E Decomposing fractions using equations	Box E Fraction addition and subtraction, pizza sharing division	Box E Writing true equations, making sense of distributive and associative property	Box E Multiplication and division with fractions	Box E Multiplication and division with fractions
Box F Evaluating multiplicative fact strategies	Box F Applying properties of multiplication	Box F Division of fractions in context	Box F Finding a fraction of a fraction in context, division of fractions in context	Box F Multiplication and division with fractions in context
Box G Model fractions in a variety of ways	Box G Place fractions on a numberline, partition area models	Box G Area model for division, using ratio table, multiplying fraction by fraction	Box G Area model for division, using ratio table, multiplying fraction by fraction	Box G Area model, number line, and ratio tables
Box H Compare fractions, tiling, measurement conversions	Box H Fraction equivalence, ordering fractions, real life area problem	Box H Ordering fractions, measurement conversion, volume of rectangular prism	Box H Ordering fractions, measurement conversion, volume of rectangular prism	Box H Compare and ordering fractions and decimals, measurement conversions

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Data Tracker for the Year

Set 1, #1-6	Set 2, #7-12	Set 3, #13-18	Set 4, #19-24	Set 5, #25-30
Box A 	Box A 	Box A 	Box A 	Box A
Box B 	Box B 	Box B 	Box B 	Box B
Box C 	Box C 	Box C 	Box C 	Box C
Box D 	Box D 	Box D 	Box D 	Box D
Box E 	Box E 	Box E 	Box E 	Box E
Box F 	Box F 	Box F 	Box F 	Box F
Box G 	Box G 	Box G 	Box G 	Box G
Box H 	Box H 	Box H 	Box H 	Box H