

Revised ALN Windowpanes

Guide to Windowpane Structure



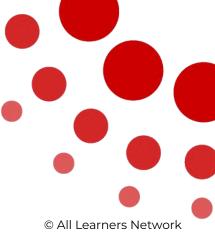












1 General Box Structure

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.

2 Thin Sliced Big Ideas

Kindergarten





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

Set 1	Set 2	Set 3	Set 4	Set 5
#1-6	#7-12	#13-18	#19-24	#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
Number: Composing and decomposing	<i>Number:</i> within 50	<i>Number</i> : within 100	<i>Number:</i> within 120	<i>Number</i> : within 101 - 120
within 20 Add/Subtract: Flexibly operating within 5	Add/Subtract: flexibly operating within 10	Add/Subtract: Flexibly operating within 30	Add/Subtract: Flexibly operating within 50	Add/subtract: 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	Set 2	Set 3	Set 4	Set 5
#1-6	#7-12	#13-18	#19-24	#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	Set 2	Set 3	Set 4	Set 5
#1-6	#7-12	#13-18	#19-24	#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	Set 2	Set 3	Set 4	Set 5
#1-6	#7-12	#13-18	#19-24	#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	Make sense of fractions as division Adding and subtracting	Modeling multiplication and division of fractions Adding and	Modeling multiplication and division of fractions Relationship	Flexibly operate with fractions
subtracting fraction with like denominators	fraction with like and related denominators	subtracting fractions with unlike denominators	between addition and subtraction of fractions	

3 Box Details

Kindergarten 30

Set 1, #1-6	Set 2, #7-12	Set 3, #13-18	Set 4, #19-24	Set 5, #25-3
Box A triangles	Box A rectangles and	Box A circles	Box A find and count	Box A how r
	squares		shapes	how many c

many sides or corners

Box B number writing 0-5 **Box B** number Box B number writing 6, Box B how many (teen Box B how many (teen writing 1, 4, 7 8.9 numbers on ten frames) numbers on ten frames)

Box C match fingers to Box C matching **Box C** match fingers to **Box C** matching fingers to **Box C** match quantities to dots 0-5 dots 0-10 auantities 1-5 dots 6-9 numerals (7-10) Box D add more dots to Box D cross out the group **Box D** count and write Box D count and write **Box D** cross out the group

with more or fewer with more or fewer how many 0-5 how many 0-10 make 11-15 **Box E** write the missing **Box E** write the missing **Box E** write the missing **Box E** write the missing

Box E write the missing number on number path 1-5 1-10 1-10 7-20 6-21

Box F order six Box F color quantity on a Box F color quantity on a Box F cross out the group **Box F** order four five frame five frame (five and some with more (quantities 1-10) nonsequential numbers nonsequential numbers more)

Box G match five frame to **Box G** match five frame to Box G color quantities on **Box G** count and write **Box G** count and write

numeral 1-5 numeral 6-9 five frame (five and some how many (teen numbers) how many (teen numbers)

more) **Box H** circle the taller **Box H** circle the taller or Box H sort objects **Box H** circle the group

Box H circle the group with more or draw more with fewer or draw fewer object or draw something shorter object or draw taller something taller/shorter

Set 2. #7-12

Box A How many? (within 20)

Box B One fewer and one

Box C How many? (within

more with 2 digit #s

Box D Interpreting a

shapes

tens)

racks

pictograph and drawing

100 (counting by ones or

Box E Number paths within

Box F Number paths by ones

or order non-sequential #s

Box G Compare sets more

and fewer or make teen #s

Box H How many (within 20)

on ten frames and bead

two different ways

Set 3. #13-18

two diait #s

100)

tens)

single ten strip)

Box A How many (dots on a

Box B +1 & -1. +10 and -10 with

Box C How many? (within

Box D Number paths within

Box E Number paths by ones

or order non-sequential #s

Box F Compare sets more

Box G How many (teen

Box H Interpret pictograph

and partition shapes for

#s different ways

numbers)

sharing

and fewer or make two digit

100 (counting by ones or

Set 4. #19-24

total

within 120)

Box A Circle a teen number

Box B How many dots? (On

ten frames and bead racks.

Box C Cross out the model

Box D Number paths by

ones or tens or order non-

sequential #s (within 120)

Box F +1 and -1. +10 and -10 in

Box G How many dots (teen

Box H Measure with cubes or

identify image of one half

numbers on ten strips)

Box E Complete the

equation (within 20)

equation form

with more or fewer

Set 5. #25-30

total

Box A Circle a teen number

Box B Draw a picture to

represent a value (101-120)

Box C How many (90-120)

Box E +1 and -1, +10 and -10 in

equation form (three digit

Box F Solve subtraction

Box G Solve for missing

Box H Tell time to hour and

half hour or identify image of

addend to make 100

remove some tens)

equations (two digit # and

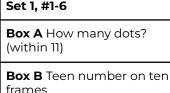
Box D Complete the

equation (within 20)

numbers)

one fourth

First Grade Set 1, #1-6





Box E Number paths within 20 or decomposing # within

after or next

Box C How many? (within 10)

Box D What # comes before.

Box F Compare which has

sequential #s within 20

more or order non-

Box G Complete the

equation or match the

equation and model (within

Box H Categorize objects or

draw shapes with 3 or 4 sides

Second Grade	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	Box H Partition shapes and count money	Box H Partition shapes, tell time, and count money		

graph

Third Grade

Box H Interpret a scaled bar

graph, partition shapes



Box H More with fractions

and area/perimeter

calculations

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 inequality statement: are true	
Box C Draw a model to match the context or	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

match the context or expression	groups or array model	model	model with an equation	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 word problems
Box E How many? (with a	Box E Quotitive division word	Box E Interpret the quotient in	Box E Solve related	Box E How many s

Box H Fractions (one half, one

fourth, one eighth), calculating

perimeter

J 3 5 1	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
3 \	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
	division word problems (group size unknown)	quotitive division word problems (# of groups unknown)	organizing playing cards into equal rows and columns	multiplication and division word problems

			equations, area meacis	lo 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 Label area models

(length, width, area), model

fractions, proving equivalence

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 someon 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 Model fractions on

rectangle and number line,

interpret pictograph

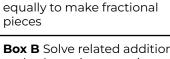
Fourth Grade



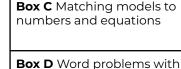
Set	1,	#1-	6	
_	_	_		

pieces

Box A Partition shapes







Box E Relational thinking as

varying operations

multiplication facts

multiplying by 10

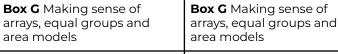
perimeter

Box F Skip counts and

Box H Label fraction models,

compare fractions, calculate

a strategy with



Set 2, #7-12

bars

eauations

property

Box A Modeling fractions on

number lines and fraction

Box B Solve related addition.

subtraction, and multiplication

Box C Partitioning arrays and

Box D Word problems with

Box E Using commutative, associative, and distributive

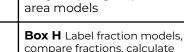
property when multiplying

Box F Skip counts and

multiplying by 10 and 100

varying operations

area models to show distributive



perimeter and area

Box G Making sense of ratio tables, number lines and area models **Box H** Adding fractions with like denominators, lines of

Set 3, #13-18

to make it true

model

Box A Interpret and model

fractions in a set model or area

Box B Evaluate equations (true

or false), complete the equation

Box C Open area model and

fractions on a number line

Box D Word problems with

Box E Use multiplication to

solve division problem, solve

related division problems

Box F Skip count. Solve

related multiplication

problems

symmetry

varying operations

Box G Solving for larger **Box G** Area models and ratio products using area model tables **Box H** Measurement Box H Angles, compare fractions and decimal conversions, comparing decimal

Set 4, #19-24

equations

and 100 arids

remainder

numbers

Box A Compare fractions

Box B Solve related

varying operations

Box E Division word

Box F Multiplicative fact

strategies, ratio tables

word problems and contexts

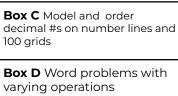
multiplication and division

Box C Model decimal fractions

Box D Word problems with

problems, making sense of a

and decimal #s on number lines.



Box E Multiplication and

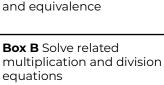
Box F Evaluate equations,

evaluate other student's

division contexts

strategies

#s



Box A Fraction foundations

Set 5, #25-30

Fifth Grade

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Set 5, #25-30

in context

with fractions

and ratio tables

Box A Whole number

operations, factors and multiples

Box B Multiplicative or additive

compare word problems

Box C Modeling fraction

operations, using ratio tables

Box D Operating with fractions

Box E Multiplication and division

Box F Multiplication and division

Box G Area model, number line.

Box H Compare and ordering

measurement conversions

fractions and decimals.

with fractions in context

Set 4, #19-24

operations

number line

context

with fractions

fractions in context

fraction by fraction

Box A Whole number

Box B Multiplicative or additive

problems, place numbers on number

Box D Multiplication, addition, or

Box E Multiplication and division

Box F Finding a fraction of a

fraction in context, division of

Box G Area model for division.

using ratio table, multiplying

Box H Ordering fractions,

measurement conversion.

volume of rectangular prism

compare word problems

Box C Using tables to solve

line, fraction multiplication on

subtraction of fractions in



Box D Addition and subtraction

word problems with fractions

Box E Decomposing fractions

Box F Evaluating multiplicative

Box H Compare fractions, tiling,

Box G Model fractions in a

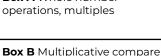
measurement conversions

with like denominators

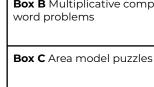
using equations

fact strategies

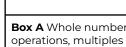
variety of ways













Set 2, #7-12

Box A Whole number

operations, multiples

Box B Multiplicative or additive

Box C Strategies for multiplying

Box D Division word problems and

Box E Fraction addition and

Box F Applying properties of

Box G Place fractions on a

numberline, partition area

Box H Fraction equivalence,

ordering fractions, real life area

subtraction, pizza sharing

fraction addition word problems with

compare word problems

with larger products

unlike denominators

division

models

problem

multiplication

Set 3, #13-18

operations

number line

Box A Whole number

compare word problems

Box C Using tables to solve

problems, place numbers on

Box D Multiplication whole #s

of fractions in context

associative property

fraction by fraction

context

Box E Writing true equations,

making sense of distributive and

Box F Division of fractions in

Box G Area model for division.

using ratio table, multiplying

Box H Ordering fractions,

measurement conversion.

volume of rectangular prism

and fractions in context, addition

Box B Multiplicative or additive

4 Data Tracker for the Year

