

KANE AREA SCHOOL DISTRICT



Alternate Math and Reading Curriculum

2026

Preparation led by Steve Bogel, Special Education Department Chair
Development and compilation by Ariel Eastman and Sarah Allgretto, Life Skills Educators

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Alternate Mathematics

Statement of Organization:

The Alternate Mathematics curriculum describes what students with the most significant cognitive disabilities should know and be able to do in math-related areas at four grade spans (third/fourth, fifth/sixth, seventh/eighth, and eleventh).

Expected Levels of Achievement:

Students are expected to meet the individual goals outlined in their Individual Education Plan.

Methods of Evaluation:

Student competence will be assessed through the use of one or more of the following methods:

- Verbal response
- Observation
- Participation
- Non-verbal responses (eye gaze, Dynovox (other assisted technology), pointing, etc.)
- Written response
- IEP goal tracking (progress monitoring)

Estimated Instructional Time:

As outlined in each student's Individual Education Plan.

Technology Integration:

In addition to print resources, students will use technology

When?

- During daily math lessons focused on number sense, computation, and functional math skills
- During independent practice or small group stations

- During community-based lessons involving money, time, or measurement
- For assessment and progress monitoring of numeracy and problem-solving skills

Why?

- To increase engagement and participation for students with diverse learning needs
- To differentiate instruction through visual and interactive supports (e.g., virtual manipulatives, digital visuals)
- To provide immediate feedback and reinforcement through interactive platforms
- To develop functional technology and problem-solving skills relevant to real-world math tasks (e.g., shopping, budgeting)

How?

- **Interactive whiteboards or touchscreen devices** to model counting, sequencing, and problem-solving
- **Chromebooks or iPads** for individualized programs such as *MobyMax*, *IXL*, or *IXL Skill Plan for Life Skills Math*
- **Boom Cards, Kahoot, or Nearpod** for interactive skill practice (number identification, computation, time, money)
- **Calculator apps and digital manipulatives** (base ten blocks, fraction models, number lines)
- **Online money-counting or graphing tools** (e.g., ABCya, Toy Theater, Math Learning Center apps)
- **Visual timers and schedules** (e.g., Time Timer app, Choiceworks) to promote independence and transitions
- **AAC or text-to-speech supports** to help students explain or describe math processes

GRADES 3/4				
Big Idea/Reporting Category	Concepts	Competencies/Eligible Content	Standards	Pacing
Numbers, Number and Number Relationships	Count using whole numbers. Use concrete objects to count, order, and group. Demonstrate an understanding of on-to-one correspondence.	Rote count by 1s up to 9. Rationally count single set of items by 1s up to 9 with and without teacher pointing. Rationally count groups of sets. Order sets of items by quantity. Sort objects into groups. Create sets of items (e.g., each set has one). Count out quantity named up to 9.	2.1.3A 2.1.3.G 2.1.3.H	Pacing will be determined based upon student's IEP goals and progress monitoring of short-term objectives.
Computation and Estimation	Use whole numbers and fractions to represent quantities	Identify numerals (0-9) Match numbers to quantities (0-9)	2.1.3. B	
	Represent equivalent forms of the same number through the use of concrete objects, drawings, word names and symbols	Match numerals to quantities (0-9) Match sets with identical quantities Read numerals	2.1.3. C	
	Use drawings, diagrams or models to show the concept of fraction as part of a whole	Identify object divided into halves	2.1.3. D	

	Count, compare, and make change using a collection of coins and one-dollar bills.	Count coins and bills Make change using coins	2.1.3. E	
	Apply estimation strategies to a variety of problems including time and money	Differentiate between “money” and non-money Differentiate between coins and bills Identify currency name Read price up to \$5/\$.05	2.2.5. E	
	Apply number patterns (even and odd) and compare values of numbers on the hundred board	Sequentially order consecutive numerals and quantities (0-9)	2.1.3. F	
	Apply addition and subtraction in everyday situations using concrete objects	Use addition and subtraction to model real life situations	2.2.3. A	
	Apply place-value concepts and numeration to counting, ordering and grouping.	Match numerals to quantities Name numerals Write numerals Identify first, second, third, etc. Order consecutive and non-consecutive numbers	2.1.3.1	
Measurement and Estimation	Compare measurable characteristics of different objects on the same dimensions	Identify lightest/heaviest, smallest/biggest, shortest/farthest, shortest/tallest, longest/shortest, etc. Match items identical	2.3.3. A	
	Determine and compare elapsed times	Use clock or other tool to compare times	2.3.3. C	
	Tell time (analog and digital) to the minute	Identify clock Read digital times to hour/half hour	2.3.3 D	
Statistics and Data Analysis	Analyze data using the concepts of largest, smallest, most often, least often and middle.	Identify values on graph ordered by size and with number prompts Biggest/smallest Most often/least often/middle	2.7.3, D	

Probability and Predications	Predict and measure the likelihood of events	Use prior knowledge and context clues to predict when happens	2.7.3. D	
Algebra and Functions	Recognize, describe, extend, create and replicate a variety of patterns including attribute, activity, number and geometric patterns	Sort dissimilar items into groups with or without sample	2.8.3. A	
	Describe and interpret the data shown in tables and charts	Locate values identified in table of 6 numbers with column or row identified	2.8.3. H	

GRADES 5/6				
Big Idea/Reporting Category	Concepts	Competencies/Eligible Content	Standards	Pacing
Numbers, Number Systems and Number Relationships	Understanding quantity and comparing numbers	Count using whole numbers up to 20. Use objects or pictures to count, order, and group. Demonstrate one-to-one correspondence. Identify numbers in the environment (classroom, community signs, price tags). Sequence numbers in order (1–20). Compare sets using “more,” “less,” or “equal.”	2.1.5A 2.1.5A 2.1.5G 2.1.5B 2.1.5H	Pacing will be dictated based upon student's IEP goals and progress monitoring of short-term objectives.
Computation and Estimation	Addition and subtraction in real-life contexts	Add within 20 using manipulatives, pictures, or number lines. Subtract within 20 using manipulatives, pictures, or number lines. Use a calculator for basic operations with support. Solve practical problems (e.g., “I have 5, eat 2, how many are left?”). Estimate totals for small purchases. Identify when to use addition vs. subtraction in word problems. Measure objects using nonstandard (blocks, cubes) and standard units (inches, centimeters). Tell time to the hour and half hour on analog and digital clocks. Use money to make simple purchases during role play or community trips. Match coins to values and combine for simple amounts. Use money to make simple purchases during role play or community trips. Compare objects by length, weight, and size.	2.2.5A 2.2.5A 2.2.5B 2.3.5C 2.4.5A	
Statistics and Data Analysis	Sorting, organizing, and interpreting data	Sort objects or pictures into categories (e.g., color, shape, food type). Tally items in a small set. Create simple picture or bar graphs with teacher support. Interpret data by answering “more,” “less,” or “same” questions.	2.6.5A 2.6.5B	

Probability and Predications	Understanding outcomes and making simple predictions	Identify possible outcomes of simple events (e.g., “heads or tails”). Describe likelihood using “always,” “sometimes,” “never.” Make simple predictions based on past experiences (e.g., daily schedule).	2.7.5A	
Algebra and Functions	Recognizing and creating patterns	Identify and extend repeating patterns using shapes, colors, or numbers. Continue simple number patterns (e.g., counting by 2s, 5s, 10s). Identify missing elements in a pattern. Demonstrate understanding of equality (e.g., $3+1=4$).	2.8.5A	

GRADES 7/8				
Big Idea/Reporting Category	Concepts	Competencies/Eligible Content	Standards	Pacing
Numbers, Number Systems and Number Relationships Computation and Estimation	Count using whole numbers. Use concrete objects to count, order, and group. Demonstrate an understanding of on-to-one correspondence.	Rote count by 1s up to 9. Rationally count single set of items by 1s up to 9 with and without teacher pointing. Rationally count groups of sets. Order sets of items by quantity. Sort objects into groups. Create sets of items (e.g., each set has one). Count out quantity named up to 9.	2.1.3A 2.1.3.G 2.1.3.H	Pacing will be dictated based upon student's IEP goals and progress monitoring of short term objectives.
	Count, compare and make change using a collection of coins and one dollar bills.	Identify value of coins/bills Count bills with mixed denominations Count bills and coins with mixed denominations Identify sufficient amounts for purchases Estimates cost of items (relative and actual)	2.2.5.E	
	Apply estimation strategies to a variety of problems including time and money.	Identify value of coins/bills Count bills with mixed denominations Count bills and coins with mixed denominations Identify sufficient amounts for purchases Estimate cost of items (relative and actual)	2.2.5.E	
	Apply number patterns (even and odd) and compare values of numbers on the hundred boards	Sequentially order consecutive and non-consecutive numerals and quantities (0 – 99)	2.1.3.F	
	Apply addition and subtraction in everyday situations using concrete objects. Apply place-value concepts and numeration to counting, ordering and grouping.	(0-99) Match numeral to quantity Name numerals Write numerals Identify first, second, third, etc. Order consecutive and non-consecutive numbers	2.2.3.A 2.1.3.I	
	Estimate, approximate, round or use exact numbers as appropriate	Identify sets with many/few; most/fewest/least Identify subsets with all, some, most, none Identify sufficiency for need	2.1.3.J	

	Demonstrate knowledge of basic facts in four basic operations. Solve single- and double-digit addition and subtraction problems with regrouping in vertical form Demonstrate the concept of multiplication as repeated addition and arrays. Demonstrate the concept of division as repeated subtraction and as sharing	Write equations for addition Write equations for subtraction Add single digit numbers Add single digit to double digit numbers, without renaming, with renaming Add two double digit numbers, without renaming; with renaming Add two three-digit numbers, without renaming, with renaming Subtract one-digit numbers* Subtract one- and two-digit numbers without renaming, with renaming Subtract two three-digit numbers without renaming, with renaming Multiply numbers Divide numbers *With or without calculator	2.1.3.L 2.2.3.B 2.2.3.C 2.2.3.D	
	Develop and apply algorithms to solve word problems Estimate amount of tips and discounts using ratios, proportions and percents.	Calculate tips Calculate discounts *With or without calculator	2.2.8.D	
Measurement and Estimation	Compare measurable characteristics of different objects on the same dimensions (e.g., time, temperature, area, length, weight, capacity, perimeter).	Identify lightest/heaviest, smallest/biggest, shortest/furthest, shortest/tallest, longest/shortest, a lot/a little, all/some/most, etc. * Match items to space Order items by weight/size Understand meaning of temperatures Match approximate numerals * differences obvious and vary on multiple dimensions	2.3.3.A	
	Estimate, use and describe measures of distance, rate, perimeter, area.	Estimate Describe distance, rate, perimeter, and area	2.3.8.D	
	Select and use standard tools to measure the size of figures with specified accuracy, including length, width, perimeter and area.	Measure to within half inch Identify 1/2, 1/4 cup measures Identify 1/2, 1/4 cup line Identify relative length when path not direct	2.3.5.B	
	Determine and compare elapsed times. Tell time (analog and digital) to the minute.	Match activities and seasons Match activities to time of day Match activities with duration Match analog and digital times to half hour Read digital times to minute Read analog time to quarter hour	2.3.3.C 2.3.3.D	

	Determine the appropriateness of overestimating or underestimating in computation.	Describe consequences of having too much/ not enough in common situations	2.2.8.E	
Statistics and Data Analysis	Answer questions based on data shown on graphs	Complete missing items on graphs	2.6.3.A	
	Compare and contrast different plots of data using values mode, and range.	Identify value on graph with and without number prompts Biggest/smallest Most often/least often/middle	2.6.8.A	
Probability and Predications	Predict and measure the likelihood of events and recognize that the results of an experiment may not match predicted outcomes.	Identifies most likely outcome based on data	2.7.3.D	
Algebra and Functions	Recognize, reproduce, extend, create and describe patterns, sequences and relationships verbally, numerically, symbolically and graphically, using a variety of materials.	Sorts similar items into groups with or without sample.	2.8.5.A	
	Describe and interpret the data shown in tables and charts	Locates values described in a table of 10 numbers with column or row identified	2.8.3.H	

GRADE 11				
Big Idea/Reporting Category	Concepts	Competencies/Eligible Content	Standards	Pacing
Numbers, Number Systems and Number Relationships Computation and Estimation	Count using whole numbers. Use concrete objects to count, order, and group. Demonstrate an understanding of on-to-one correspondence.	Rote count by 1s up to 9. Rationally count single set of items by 1s up to 9 with and without teacher pointing. Rationally count groups of sets. Order sets of items by quantity. Sort objects into groups. Create sets of items (e.g., each set has one). Count out quantity named up to 9.	2.1.3A 2.1.3.G 2.1.3.H	Pacing will be dictated based upon student's IEP goals and progress monitoring of short term objectives.
	Use models to represent fractions	Identify largest or smallest portions Identify diagram showing x pieces of whole (halves, thirds, fourths, eighths)	2.1.3.D	
	Count, compare and make change using a collection of coins and one-dollar bills (up to 500) Apply estimation strategies to a variety of problems including time and money	Count bills with mixed denominations Count bills and coins Identify sufficiency for purchases Estimate costs of items (relative and actual)	2.1.3.E 2.2.5.E	
	Apply number patterns (even and odd) and compare values of numbers on the hundred board	Sequentially order consecutive and non-consecutive numerals and quantities (0-500)	2.1.3.F	
	Apply addition and subtraction in everyday situations using concrete objects Apply place-value concepts and numeration to counting, ordering, and grouping.	0-500 Match numerals to quantities Name numerals Write numerals Identify first, second, third, etc. Order consecutive and non-consecutive numbers	2.2.3.A 2.1.3.I	
	Demonstrate knowledge of basic facts in four basic operations Solve single-and double-digit addition and subtraction problems with regrouping in vertical form	Solve addition and subtraction problems (single and double-digit if applicable)	2.1.3.L 2.2.3.B	

Measurement and Estimation	Compare measurable characteristics of different objects on the same dimensions (e.g., time, temperature, area, length, weight, capacity, perimeter)	Identify lightest/heaviest, smallest/biggest, shortest/furthest, shortest/tallest, longest/shortest, a lot/a little, all/some/most, etc. Order items by weight/size Understand meaning of temperatures Match approximate numerals * differences obvious and vary on multiple dimensions	2.3.3.A	
	Select and use appropriate units and tools to measure to the degree of accuracy required in particular measurement situations Demonstrate the ability to produce measures with specified levels of precision	Demonstrate use of tools Demonstrate measurement	2.3.5.A 2.3.11.C	
	Determine and compare elapsed times Tell time (analog and digital) to the minute	Match activities and seasons Match activities to time of day Match activities with duration Match analog and digital times to half hour Read digital times to minute Read analog time to quarter hour	2.3.3.C 2.3.3.D	
Statistics and Data Analysis	Answer questions based on data shown on graphs	Identify value on graph Discriminate biggest/smallest, most often/least often/middle	2.6.3.A	
Probability and Predications	Predict and measure the likelihood of events and recognize that the results of an experiment may not match predicted outcomes	Identify most often//least likely outcome based on data	2.7.3.D	
Algebra and Functions	Recognize, reproduce, extend, create and describe patterns, sequences and relationships verbally, numerically, symbolically and graphically, using a variety of materials.	Sort similar items into groups with or without sample	2.8.5.A	
	Describe and interpret the data shown in tables and charts	Locate value described in table of 12 numbers with or without column or row identified	2.8.3.H	

Alternate Reading

Statement of Organization:

The Alternate Reading curriculum describes what students with the most significant cognitive disabilities should know and be able to do in literacy-related areas at four grade spans (third/fourth, fifth/sixth, seventh/eighth and eleventh).

Expected Levels of Achievement:

Students are expected to meet the individual goals outlined in their Individual Education Plan.

Methods of Evaluation:

Student competence will be assessed through the use of one or more of the following methods:

- Verbal response
- Non-verbal responses (eye gaze, Dynovox (other assisted technology), pointing, etc.)
- Observation
- Participation
- Written response
- IEP goal tracking (progress monitoring)

Estimated Instructional Time:

As outlined in each student's Individual Education Plan.

Technology Integration:

In addition to print resources, students will use technology.

When?

- During daily reading and language arts instruction (whole group, small group, or independent)
- During guided reading, phonics, and comprehension centers
- During life skills activities that require reading in real-world contexts (menus, signs, schedules)

- For assessment and progress monitoring of reading fluency and comprehension

Why?

- To increase engagement and participation for students with diverse reading abilities
- To differentiate instruction using multimodal supports (visual, auditory, interactive)
- To support decoding, fluency, and comprehension through scaffolded technology tools
- To foster communication and self-expression using literacy-based AAC systems
- To develop real-world digital literacy for navigating text in digital and community environments

How?

- **Interactive whiteboard or touchscreen devices** to display and annotate text, model decoding and comprehension strategies
- **Chromebooks** for individualized learning programs such as *Reading Eggs*, *MobyMax Reading*, or *Starfall*
- **Boom Cards/Kahoot** for sight word recognition, comprehension, and phonics activities
- **Text-to-speech and speech-to-text tools** to support reading aloud and writing responses
- **AAC and literacy-based communication apps** (Proloquo2Go, TouchChat, LAMP Words for Life) for expressive reading tasks
- **Digital leveled readers and e-books** (Epic!, Raz-Kids, or News2You) for accessible, high-interest reading material
- **Videos and digital stories** (YouTube Kids, Boardmaker Online) to build background knowledge and comprehension
- **Visual schedules and timers** to support focus and task completion

GRADES 3/4				
Big Idea/Reporting Category	Concepts	Competencies/Eligible Content	Standards	Pacing
Learning to Read Independently	Identify the purposes and types of text	Identify books Identify books as a source of information Predict topic of story or book based on pictures	1.1.3.A	Pacing will be determined based upon student's IEP goals and progress monitoring of short-term objectives.
	Preview the text formats (e.g., title, headings)	Orient towards materials Locate parts of books (title, etc.)	1.1.3 B	
	Use knowledge of phonics, picture and context clues to decode	Discriminate between objects, pictures, icons, words, sounds Match identical objects, pictures, icons, words Label objects, pictures, icons, and words Discriminate beginning sound of objects and words	1.1.3. C	
	Acquire a reading vocabulary by identifying and correctly using words	Label items, pictures, icons, words Identify commonality of items and groups them accordingly	1.1.3, E	
	Understand the meaning of and use correctly new vocabulary learned in various subject areas	Identify items, pictures, icons, or words described Identify similar and related items, pictures, icons, or words Identify object by function described Indicate function of item	1.1.3, F	
	Demonstrate understanding and interpretation of word/text	Define words Categorize words by meaning Choose word to complete phrase/sentence	1.1. 3, G	
	Demonstrate after reading understand of fiction	Answer literal who, what, where, when comprehension questions after text is read Sequence pictures based on text Locate pictures illustrating text meaning Follow 1-2 step instructions	1.1.3. G	
	Demonstrate fluency and comprehension in reading	Read words in isolation Read words in context	1.1.3. H	

GRADES 5/6				
Big Idea/Reporting Category	Concepts	Competencies/Eligible Content	Standards	Pacing
Foundational Reading Skills	Print awareness and decoding	Recognize upper- and lowercase letters. Match letters to their corresponding sounds. Read CVC (consonant-vowel-consonant) words using pictures or objects. Recognize sight words in environmental print (e.g., STOP, EXIT, MEN/WOMEN).	1.1.5. A	Pacing will be dictated based upon student's IEP goals and progress monitoring of short-term objectives.
			1.1.5C	
Reading Comprehension	Understanding stories and information	Answer who, what, where questions about short texts with support. Sequence 2–3 events from a story using pictures or sentences. Identify the main idea or character in a story.	1.2.5A	
Vocabulary and Language	Building vocabulary for everyday use	Identify and name objects in the environment (classroom, home, community). Use context or visual cues to determine word meanings. Sort objects or pictures by category (e.g., food, clothing, furniture).	1.7.5A	
Writing and Communication	Expressing ideas through text or assistive technology	Copy or trace letters, words, or student's name. Compose words or short phrases using pictures, letters, or AAC devices. Use technology (switch, AAC device, keyboard) to produce written work with support.	1.4.5A 1.5.5A	
Functional Literacy	Using reading in daily life	Read and follow simple picture/word directions. Identify signs, labels, and environmental print in school and community settings. Use schedules, menus, or lists to complete tasks independently or with support.	1.1.5B	

GRADES 7/8				
Big Idea/Reporting Category	Concepts	Competencies/Eligible Content	Standards	Pacing
Learning to Read Independently	Locate appropriate texts for an assigned purpose before reading.	Choose correct source for needed information	1.1.8.A	Pacing will be dictated based upon student's IEP goals and progress monitoring of short-term objectives.
	Identify and use common structures and graphic features to comprehend information.	Match identical pictures, icons, words Locates pictures, icons, words named Uses titles, pictures etc to identify content of source	1.1.8.B	
	Use knowledge of phonics, syllabication, prefixes, suffixes, root words as well as context clues and glossaries to understand vocabulary during reading.	Discriminate beginning sounds of objects and words Demonstrate letter- sound knowledge Identifies words that rhyme Use pictures and context to identify words	1.1.8.C	
	Expand a reading vocabulary	Identify similar and related pictures/words Identifies categories of pictures/words Identify function of pictures/words Identifies picture based on characteristics named/described Reads complex pictures Read words in isolation	1.1.8.E	
	Understand the meaning of and apply key vocabulary across the various subject areas	Identify function of item presented as object, picture or word Define words with examples Demonstrate meaning of word by categorizing	1.1.8.F	
	Demonstrate after reading understanding and interpretation of both fiction and nonfiction text, including public documents.	Identify main event in picture/text Identify next event in picture/text Sequence events Identifies detail in picture/text Identify facts in narrative/expository text Locate information in text Identify topic of story from picture/title Identify function of word Identify last word to complete sentence/passage Order 3 phrases representing main ideas from text	1.1.8.G	
	Demonstrate fluency and comprehension in reading	Read words paired with pictures Read words in context Read words in sentences/paragraphs Answer literal and inferential questions after text is read to student Answer comprehension questions after reading text Reads and/or follows 1-2 step directions	1.1.8.H	

GRADE 11				
Big Idea/Reporting Category	Concepts	Competencies/Eligible Content	Standards	Pacing
Learning to Read Independently	Locate various texts, media and traditional resources for assigned and independent projects before reading.	Identify content of material Choose correct source for needed information	1.1.3.A	Pacing will be dictated based upon student's IEP goals and progress monitoring of short-term objectives.
	Analyze the structure of informational materials	Use titles, pictures, etc to identify content of source	1.1.11.B	
	Use knowledge of root words and words from literary works to recognize and understand the meaning of new words during reading.	Use these words accurately in speaking and writing.	1.1.11.C	
	Establish a reading vocabulary by identifying and correctly using new words acquired through the study of their relationships to other words. Use a dictionary or related reference.	Identify similar and related pictures/words Identify categories of pictures/words Identify function of pictures/words Identify picture based on characteristics named/described Read complex pictures Read words in isolation	1.1.11.E	
	Understand the meaning of and apply key vocabulary across the various subject areas.	Identify function of item presented as object, picture or word Define words with examples Demonstrate meaning of word by categorizing	1.1.11.F	
	Demonstrate after reading understanding and interpretation of both fiction and nonfiction text, including public documents.	Identify main event in picture/text Identify next event in picture/text Sequence events Identify detail in picture/text Identify facts in narrative/expository text Locate information in text Identify topic of story from picture/title Identify function of word Identify last word to complete sentence/passage Order phrases representing main ideas from text	1.1.11.G	

	Demonstrate fluency and comprehension in reading.	Read words paired with pictures Read words in context Read words in sentences/paragraphs Answer literal and inferential questions after text is read to student Answer comprehension questions after reading text Reads and/or follows 1-2 step direction	1.1.11.H	
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