1980

Camas School District; Mathematics Curriculum, Student Learning Objectives K-8

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CAMAS SCHOOL DISTRICT; MATHEMATICS CURRICULUM, STUDENT LEARNING OBJECTIVES K-8

A Project

Presented to

The Graduate Faculty

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In Partial Fulfillment

Of the Requirements for a Degree

Master of Education

Supervision and Curriculum

by

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INTRODUCTION

The Camas School District; Student Learning Objectives (K-8) is designed to help school district personnel comply with Washington State Student Learning Objectives Law RCW 28A.58.090, which requires that all school districts in the state of Washington develop student learning objectives in the areas of reading, language arts, and mathematics. This guide was developed to identify, clarify, and catagorize, sets of goals and student learning objectives which will improve students' learning opportunities in the area of mathematics, and at the same time provide direction for the classroom teacher.

This guide does not reflect all of the goals and objectives taught at any specific grade level, but the goals and objectives which the community of Camas and the Camas School District feel are the backbone of our mathematics curriculum.

This guide will be considered a working document. As it is used, suggestions for change or revision will be noted so that the guide can constantly reflect the views of the Camas community, school district and the needs of our students.

An effort was made by the community and professional staff not to develop the goals and objectives around any one set of materials. The scope and sequence should prove to be appropriate for a variety of materials.

STATEMENT OF PURPOSE

The purpose of this document is to satisfy the legal requirements of the Student Learning Objectives Law RCW 28A.58.090 and to provide the Camas School District with math student learning objectives and indicators. Contained in this guide are the objectives and indicators that the Camas School District chose as their student learning objectives. Through the use of these objectives the parents, the Camas School District, and the Superintendent of Public Instruction will be able to measure student achievement and performance.

REVIEW OF LITERATURE

The following resources were used in gathering ideas and information related to scope, sequence, content and structure for the Mathematics Student Learning Objectives developed for the Camas School District.

1. Guide to Student Learning Objectives Law RCW 28A.58.090. Superintendent of Public Instruction, Olympia, Washington, 1978.

The guide states the Student Learning Objective Law, interprets the law, defines terms, explains assessment of objectives and program, and lists desirable characteristics. In addition, the guide answers commonly asked questions about the Student Learning Objective Law.

2. Handbook for School District Implementation of the Student Learning Objective Laws, Superintendent of Public Instruction, Olympia, Washington, 1978

This handbook was designed to help school district personnel understand the intent of the law, identify requirements and give suggestions how school districts might move toward implementation of the objectives.

3. Small Schools Mathematics Curriculum K-3, Superintendent of Public Instruction, Olympia, Washington, 1977.

Included in the curriculum guide are sequential student learning objectives, suggested activities, monitoring procedures and possible resources.

4. Camas School District Curriculum Guide, Camas School District #117, Camas, Washington, 1976.

This mathematics curriculum guide describes the K-12 goals and objectives written in 1976. The objectives are organized within a system, separated according to review, master, develop, introduce and develop and introduce.

5. Mathematics K-6 Resource Book, Longbeach Unified School District, Longbeach, California, 1977.

The purpose of this guide is to assist teachers in planning an effective mathematics program. The major strands in the program are arithmetic, numbers, operations, geometry, measurements, problem solving/applications, probability and statistics, relations and functions and logical thinking. The Camas School District has permission to reprint the guide from the Longbeach School District and uses the guide as resource material.

PROCEDURE

The purpose and process of developing the student learning objectives were first discussed at a meeting on October 25, 1977. Attending the meeting were Dan Peoples, District Curriculum Administrator; Lester Portner, District Administrator for Mathematics; and Mathematics Committee members Virginia Anderson, Dale Croswell, Don Manney, Kay Persons, Jack Purdy, Diana Rennie, Elton Richardson, and chairman Greg Strohmaier.

Input for the mathematics student learning objectives was to be received from the Instructional Council, Citizens' Advisory Committee, the Camas School Board and the grade level teachers throughout the Camas School District.

The following school year I scheduled and attended approximately twenty-five meetings. My responsibilities at grade level meetings involved acting as a resource person, helping provide continuity of indicators and proof-reading grade level suggestions. At cross grade level meetings, I was involved with the sharing of grade level ideas and concerns and the sequencing of pre and post skills. The reporting of committee progress was made by District Mathematics Administrator, Lester Portner, and myself at the Instructional Council meetings. The Instruction Council consists of a representative of the Citizens' Advisory Committee, a School Board Representative, grade level and department chairpersons and student representatives. The evaluation of the student learning objectives was to be attained by standardized tests, teacher made tests and teacher judgement. Finally, a form for recording and reporting the objectives was developed.

On November 25, 1978, the Camas School District, Mathematics Curriculum, Student Learning Objectives K-8 were adopted.

CAMAS SCHOOL DISTRICT;

MATHEMATICS CURRICULM

STUDENT LEARNING OBJECTIVES K-8

AS ADOPTED BY THE CAMAS SCHOOL DISTRICT

ON NOVEMBER 25, 1978

STUDENT LEARNING OBJECTIVES

The student will demonstrate a proficiency in computation.

The student will demonstrate a proficiency in numeration.

The student will demonstrate a proficiency in measurement.

SCOPE AND SEQUENCE

OF INDICATORS

CAMAS SCHOOL DISTRICT #117
STUDENT LEARNING OBJECTIVES
& INDICATORS

MATHEMATICS

STUDENT'S NAME

Indicator SLO Grade		Introduced Taught	Retaught Learned	Retaught & Tested
	KINDERGARTEN			
	COMPUTATION			
C-1	Use manipulative objects to identify one more than			
C-2	Use manipulative objects to join sets			
C-3	Use manipulative objects to identify one less than			
	NUMERATION			
N-1	Count orally to twenty by ones			
N-2	Indicate first, second, and third			
N-3	Recognize one half of a whole			
N-4	Write numbers 0 through five			
N-5	Count members of a group (0-10)			
N-6	Match members of a group (0-10) to corresponding numerals			
	MEASUREMENT			
	Identify big and little			
	Identify short and tall			
M-3	Identify top and bottom			
M-4	Identify above and below			
M-5	Identify under and over			
M-6	Identify the four basic shapes: square, triangle, rectangle, and circle			
M-7	Verbalize the function of a clock			
M-8	Identify a calendar			
	FIRST GRADE			
	COMPUTATION			
C-1	Solve sums of number combinations through ten			
C-2	Add three addends with a sum of ten or less			
C-3	Solve subtraction combinations with minuends through ten			
C-4	Identify the plus sign			
C-5	Identify the equal sign			
C-6	Identify the minus sign			
	NUMERATION			
N-1	Name numerals 0-100 in sequence			
N-2	Write numerals 0-20 in and out of sequence			

Indicator SLO Grade		Introduced Taught	Retaught Learned	Retaught & Tested
1-N-3	Count orally to one hundred by ones			
1-N-4	Count orally to one hundred by tens			
1-N-5	Count orally to fifty by fives			
1-N-6	Match a set of picture objects to twenty to the correspond. numeral			
1-N-7	Identify one half of a whole			
	MEASUREMENT			
1-M-1	Tell time to the hour			
1-M-2	Identify a penny			
1-M-3	Identify a nickel			
1-M-4	Identify a dime			
1-M-5	Identify a quarter			
1-M-6	Read the calendar days of the week			

CAMAS SCHOOL DISTRICT #117
STUDENT LEARNING OBJECTIVES
& INDICATORS

MATHEMATICS

REV 11/25/78

Indicator		Taught	Learned	Retaught
	COMPUTATION			
C-1	Use manipulative objects to identify one more than			
C-2	Use manipulative objects to join sets			
C-3	Use manipulative objects to identify one less than			
C-1	Solve sums of number combinations through ten			
C-2	Add three addends with a sum of ten or less			
C-3	Solve subtraction combinations with minuends through ten			
C-4	Identify the plus sign			
C-5	Identify the equal sign			
C-6	Identify the minus sign			
C-1	Write addition facts one through (20)			
C-2	Write a dictated problem in correct form vertically			
C-3	Add two & three one-digit numerals in a column or horizontally up to the sum of twenty			
C-4	Subtract two-digit numerals without regrouping			
C-5	Add two-digit numerals without regrouping			
C-1	Add three-digit numerals with regroup			
C-2	Write addition facts zero through twenty			
C-3	Add using money			
C-4	Subtract a three-digit numeral with regrouping			
C-5	Write subtraction facts zero through twenty			
C-6	Subtract using money			
C-7	Write multiplication facts through fives			
C-8	Write division facts through fives			
C-1	Add four-digit numerals in columnar form			
C-2	Subtract four-digit numerals in columnar form			
C-3	Change addition number sentences to columnar form			
C-4	Change subtraction number sentences to columnar form			
C-5	Name multiplication facts through nine times nine			
C-6	Write multiplication facts through nine times nine			
C-7	Name division facts through nine times nine			
C-8	Write division facts through nine			

Indicator		Taught
4-C-9	Divide using one-digit numbers with remainders where the quotient is one digit with a remainder	
4-C-10	Multiply one-digit numerals times two-digit numerals	
4-C-11	Match or identify fractions to corresponding pictures	
4-C-12	Add fractions with like denominators	
4-C-13	Subtract fractions with like denominators	
4-C-14	Compare fractions that have a numerator of 1 for their >, < qualities	
5-C-1	Add fractions with unlike denominators up to a denominator of 12	
5-C-2	Subtract fractions with unlike denominators up to a denominator of 12	
5-C-3	Use multiplication facts through twelve times twelve	
5-C-4	Use division facts through twelve times twelve	
5-C-5	Check simple division problems with multiplication	
5-C-6	Find equal fractions (renaming)	
6-C-1	Add columns of five-digit numerals	
6-C-2	Add fractions	
6-C-3	Add mixed numbers	
6-C-4	Add decimals	
6-C-5	Subtract five-digit numerals including regrouping	
6-C-6	Subtract fractions	
6-C-7	Subtract mixed numbers	
6-C-8	Multiply three-digit numerals	
6-C-9	Multiply fractions	
6-C-10	Multiply mixed numbers	
6-C-11	Divide using two-digit division	
6-C-12	Divide fractions	
6-C-13	Divide mixed numbers	
6-C-14	Solve proportion problems with one unknown using cross multiplying	
7-C-1	Find averages	
8-C-1	Add integers	
8-C-2	Subtract integers	
8-C-3	Multiply integers	
8-C-4	Divide integers	
8-C-5	Solve equations with one unknown	

CAMAS SCHOOL DISTRICT #117

STUDENT LEARNING OBJECTIVES & INDICATORS

MATHEMATICS

STUDENT'S NAME

Indicator Std. Grade	Taught	Learned	Retaught	Mastered Carried to Jr. High
FOURTH GRADE				
COMPUTATION				
4-C-1 Add four-digit numerals in columnar form				
4-C-2 Subtract four-digit numerals in columnar form				
4-C-3 Change addition number sentences to columnar form				
4-C-4 Change subtraction number sentences to columnar form				
4-C-5 Name multiplication facts through nine times nine				
4-C-6 Write multiplication facts through nine times nine				
4-C-7 Name division facts through nine times nine				
4-C-8 Write division facts through nine times nine				
4-C-9 Divide using one-digit numbers with remainders where the quotient is one digit with a remainder				
4-C-10 Multiply one-digit numerals times two-digit numerals				
4-C-11 Match or identify fractions to corresponding pictures				
4-C-12 Add fractions with like denominators				
4-C-13 Subract fractions with like denominators				
4-C-14 Compare fractions that have a numerator of 1 for their >,< qualities				
NUMERATION				
4-N-1 Read numbers through one million				
4-N-2 Write numbers through one million				
MEASUREMENT				
4-M-1 Express time to the nearest minute including terms a.m. and p.m.				
4-M-2 Count change up to and including one dollar				
4-M-3 Make change up to and including one dollar				
FIFTH GRADE				
COMPUTATION				
5-C-1 Add fractions with unlike denominators up to a denominator of 12				
5-C-2 Subtract fractions with unlike denominators up to a denominator of 12				
5-C-3 Use multiplication facts through twelve times twelve				
5-C-4 Use division facts through twelve times twelve				
5-C-5 Check simple division problems with multiplication				
5-C-6 Find equal fractions (renaming)				
NUMERATION				
5-N-1 Identify place value through one million				
MEASUREMENT				
5-M-1 Recognize a point				
5-M-2 Recognize a line				
5-M-3 Recognize a line segment				
5-M-4 Recognize a ray				
5-M-5 Recognize an angle				
5-M-6 Recognize congruent figures				
5-M-7 Recognize similar figures				
5-M-8 Recognize parallel lines				
5-M-9 Recognize intersecting lines				
5-M-10 Recognize perpendicular lines				

INDICATORS BY GRADE LEVEL

REV 11/25/78

CAMAS SCHOOL DISTRICT #117
STUDENT LEARNING OBJECTIVES & INDICATORS

MATHEMATICS

SIS Indicator	NUMERATION	Taught	Learned	Retaught
N-1	Count orally to twenty by ones			
N-2	Indicate first, second, and third			
N-3	Recognize one half of a whole			
N-4	Write numbers 0 through five			
N-5	Count members of a group (0-10)			
N-6	Match members of a group (0-10) to corresponding numerals			
N-1	Name numerals 0-100 in sequence			
N-2	Write numerals 0-20 in and out of sequence			
N-3	Count orally to one hundred by ones			
N-4	Count orally to one hundred by tens			
N-5	Count orally to fifty by fives			
N-6	Match a set of picture objects to twenty to the correspond. numeral			
N-7	Identify one half of a whole			
N-1	Write to two hundred by ones			
N-2	Count to one hundred by twos			
N-3	Count to one hundred by fives			
[illegible]	Count to one hundred by tens			
N-5	Write to one hundred by twos			
N-6	Write to one hundred by fives			
N-7	Write to one hundred by tens			
N-8	Read number words one through ten			
N-9	Identify one fourth of a whole			
N-10	Identify one third of a whole			
N-1	Read whole numbers through one thous.			
N-2	Write whole numbers through one thous			
N-3	Read one half of a whole			
N-4	Read one fourth of a whole			
N-5	Read one third of a whole			
N-6	Write one half of a whole			
N-7	Write one fourth of a whole			
N-8	Write one third of a whole			
N-9	Identify place value to hundredths			
N-1	Read numbers through one million			
N-2	Write numbers through one million			
N-1	Identify place value through one million			
N-1	Read numerals through one billion			
N-2	Write numerals through one billion			
N-3	Recognize place value through one billion			
N-4	Recognize place value in decimal notation through thousandths			
[illegible]	Read numbers through ten billion			
N-2	Write numbers through ten billion			
N-3	Recognize fractional equivalents in fractions			

Grade SIS Indicator		Taught
7-N-4	Recognize fractional equivalents in decimals	
7-N-5	Rec. fractional equivalents in percentages	
7-N-6	Demonstrate use of symbols = ≠ < >	
7-N-7	Demonstrate properties of ratios by using ratio problems	
7-N-8	Round numbers to nearest one hundred thousand in whole numbers	
7-N-9	Round numbers to nearest thousandths in decimals	
7-N-10	Estimate answers in decimals	
7-N-11	Estimate answers in story problems	
8-N-1	Recognize fractional equivalents in fractions (e.g. one half, one third, two thirds, one fourth, three fourths one fifth, one tenth)	
8-N-2	Recognize fractional equivalents in decimals (e.g. one half, one third, two thirds, one fourth, three fourths, one fifth, one tenth)	
8-N-3	Recognize fractional equivalents in percentages (e.g. one half, one third two thirds, one fourth, three fourths one fifth, one tenth)	

CAMAS SCHOOL DISTRICT #117
STUDENT LEARNING OBJECTIVES
& INDICATORS

REV 11/25/78

MATHEMATICS

MEASUREMENT

SLO Indicator		Taught	Learned	Retaught
-M-1	Identify big and little			
-M-2	Identify short and tall			
-M-3	Identify top and bottom			
-M-4	Identify above and below			
-M-5	Identify under and over			
-M-6	Identify the four basic shapes: square, triangle, rectangle, and circle			
-M-7	Verbalize the function of a clock			
-M-8	Identify a calendar			
-M-1	Tell time to the hour			
-M-2	Identify a penny			
-M-3	Identify a nickel			
-M-4	Identify a dime			
-M-5	Identify a quarter			
-M-6	Read the calendar days of the week			
-M-1	Read time to the half hour			
-M-2	Write time to the half hour			
-M-3	Read the calendar days of the week			
4	Say the calendar months in order			
-5	Recognize number of cents in a penny			
-M-6	Recognize number of cents in nickel			
-M-7	Recognize number of cents in a dime			
-M-8	Recognize number of cents in quarter			
-M-9	Recognize the dollar sign			
-M-10	Recognize the cent sign			
-M-11	Identify that twelve inches equals one foot			
-M-12	Measure to the nearest inch up to twelve inches			
3-M-1	Tell time to the nearest quarter hour			
3-M-2	Indicate the numerical value of a day			
3-M-3	Indicate the numerical value of days			
3-M-4	Indicate the numerical value of days in a month			
3-M-5	Indicate the numerical value of weeks in a month			
3-M-6	Measure to the nearest half inch on a ruler			
3-M-7	Measure to the nearest quarter inch on a ruler			
4-M-1	Express time to the nearest minute including terms a.m. and p.m.			
4-M-2	Count change up to and including one dollar			
4 -3	Make change up to and including one dollar			
5-M-1	Recognize a point			
5-M-2	Recognize a line			
5-M-3	Recognize a line segment			

Grade SLO Indicator		Taught
5-M-4	Recognize a ray	
5-M-5	Recognize an angle	
5-M-6	Recognize congruent figures	
5-M-7	Recognize similar figures	
5-M-8	Recognize parallel lines	
5-M-9	Recognize intersecting lines	
5-M-10	Recognize perpendicular lines	
6-M-1	Measure distance	
6-M-2	Measure perimeter	
6-M-3	Measure area	
7-M-1	Use formulas to find perimeters of any polygon	
7-M-2	Use formulas to find area of circles	
7-M-3	Use formulas to find area of polygons	
7-M-4	Use formulas to find surface area of prisms	
8-M-1	Use formulas to find perimeters of any polygon	
8-M-2	Use formulas to find area of circles	
8-M-3	Use formulas to find area of polygons	
8-M-4	Use formulas to find surface area of prisms	

FORMAL REPORTING FORMS

CAMAS SCHOOL DISTRICT #117 -- STUDENT LEARNING OBJECTIVES & INDICATORS

KI

☑ Indicates the objective has been taught

☒ Indicates the objective has been learned but does not insure retention

Student's Name

Teacher's Name School Yr.

Indicator SLO Grade	MATHEMATICS	Fall	Winter	Spring
	COMPUTATION			
K-C-1	Use manipulative objects to identify one more than			
K-C-2	Use manipulative objects to join sets			
K-C-3	Use manipulative objects to identify one less than			
	NUMERATION			
K-N-1	Count orally to twenty by ones			
K-N-2	Indicate first, second, and third			
K-N-3	Recognize one half of a whole			
K-N-4	Write numbers 0 through five			
K-N-5	Count members of a group (0-10)			
K-N-6	Match members of a group (0-10) to corresponding numerals			
	MEASUREMENT			
K-M-1	Identify big and little			
K-M-2	Identify short and tall			
K-M-3	Identify top and bottom			
K-M-4	Identify above and below			
K-M-5	Identify under and over			
K-M-6	Identify the four basic shapes: square, triangle, rectangle, and circle			
K-M-7	Verbalize the function of a clock			
K-M-8	Identify a calendar			

Indicator SLO Grade	LANGUAGE ARTS	Fall	Winter
	LISTENING		
K-1-1	Will not interrupt speaker		
K-1-2	Will not distract other listeners		
K-1-3	Respond to one oral direction		
K-1-4	Respond appropriately to words and questions		
	SPEAKING		
K-2-1	Articulate p, b, m, w, h, d, t, n, g, k, and all vowel sounds		
K-2-2	Speak in complete sentences		
	HANDWRITING		
K-3-1	Distinguish between straight and curved lines		
K-3-2	Develop awareness of left and right		
	CAPITALIZATION		
K-4-1	Start first name with capital letter		
	COMPOSITION		
K-6-1	Dictate a one-sentence story		
	LIBRARY & REFERENCE		
K-9-1	Select a book		
K-9-2	Write name & room no. on correct card		
	SPELLING		
K-10-1	Spell first name orally		

OMMENTS:

CAMAS SCHOOL DISTRICT #117 -- STUDENT LEARNING OBJECTIVES & INDICATORS KINDERGARTEN

☑ Indicates the objective has been taught

☒ Indicates the objective has been learned but does not insure retention

Student's Name

Teacher's Name School Yr.

Indicator SLO	MATHEMATICS	Fall	Winter	Spring
	COMPUTATION			
K-C-1	Use manipulative objects to identify one more than			
K-C-2	Use manipulative objects to join sets			
K-C-3	Use manipulative objects to identify one less than			
	NUMERATION			
K-N-1	Count orally to twenty by ones			
K-N-2	Indicate first, second, and third			
K-N-3	Recognize one half of a whole			
K-N-4	Write numbers 0 through five			
K-N-5	Count members of a group (0-10)			
K-N-6	Match members of a group (0-10) to corresponding numerals			
	MEASUREMENT			
K-M-1	Identify big and little			
K-M-2	Identify short and tall			
K-M-3	Identify top and bottom			
K-M-4	Identify above and below			
K-M-5	Identify under and over			
K-M-6	Identify the four basic shapes: square, triangle, rectangle, and circle			
K-M-7	Verbalize the function of a clock			
K-M-8	Identify a calendar			

Indicator SLO Grade	LANGUAGE ARTS	Fall	Winter	Spring
	LISTENING			
K-1-1	Will not interrupt speaker			
K-1-2	Will not distract other listeners			
K-1-3	Respond to one oral direction			
K-1-4	Respond appropriately to words and questions			
	SPEAKING			
K-2-1	Articulate p, b, m, w, h, d, t, n, g, k, and all vowel sounds			
K-2-2	Speak in complete sentences			
	HANDWRITING			
K-3-1	Distinguish between straight and curved lines			
K-3-2	Develop awareness of left and right			
	CAPITALIZATION			
K-4-1	Start first name with capital letter			
	COMPOSITION			
K-6-1	Dictate a one-sentence story			
	LIBRARY & REFERENCE			
K-9-1	Select a book			
K-9-2	Write name & room no. on correct card			
	SPELLING			
K-10-1	Spell first name orally			

COMMENTS:

INFORMAL CLASSROOM RECORDING FORMS

NAMES

1. 2. 3. 4. 5. 6. 7. 8. 9. 10. 11. 12. 13. 14. 15. 16. 17. 18. 19. 20. 21. 22. 23. 24. 25. 26. 27. 28. 29. 30. 31. 32. 33. 34. 35. 36. 37. 38. 39. 40.

CAMAS SCHOOL DISTRICT #117
STUDENT LEARNING OBJECTIVES & INDICATORS

MATHEMATICS
(Kindergarten)

COMPUTATION

K-C-1 Use manipulative objects to identify one more than

K-C-2 Use manipulative objects to join sets

K-C-3 Use manipulative objects to identify one less than

NUMERATION

K-N-1 Count orally to twenty by ones

K-N-2 Indicate first
second
third

K-N-3 Recognize one half of a whole

K-N-4 Write numbers 0 through five

K-N-5 Count members of a group (0-10)

K-N-6 Match members of a group (0-10) to corresponding numerals

CAMAS SCHOOL DISTRICT #117
STUDENT LEARNING OBJECTIVES & INDICATORS

MATHEMATICS
(Kindergarten)

NAMES

1. 2. 3. 4. 5. 6. 7. 8. 9. 10. 11. 12. 13. 14. 15. 16. 17. 18. 19. 20. 21. 22. 23. 24. 25. 26. 27. 28. 29. 30. 31. 32. 33. 34. 35. 36. 37. 38. 39. 40.

MEASUREMENT

K-M-1 Identify big
little

K-M-2 Identify short
tall

K-M-3 Identify top
bottom

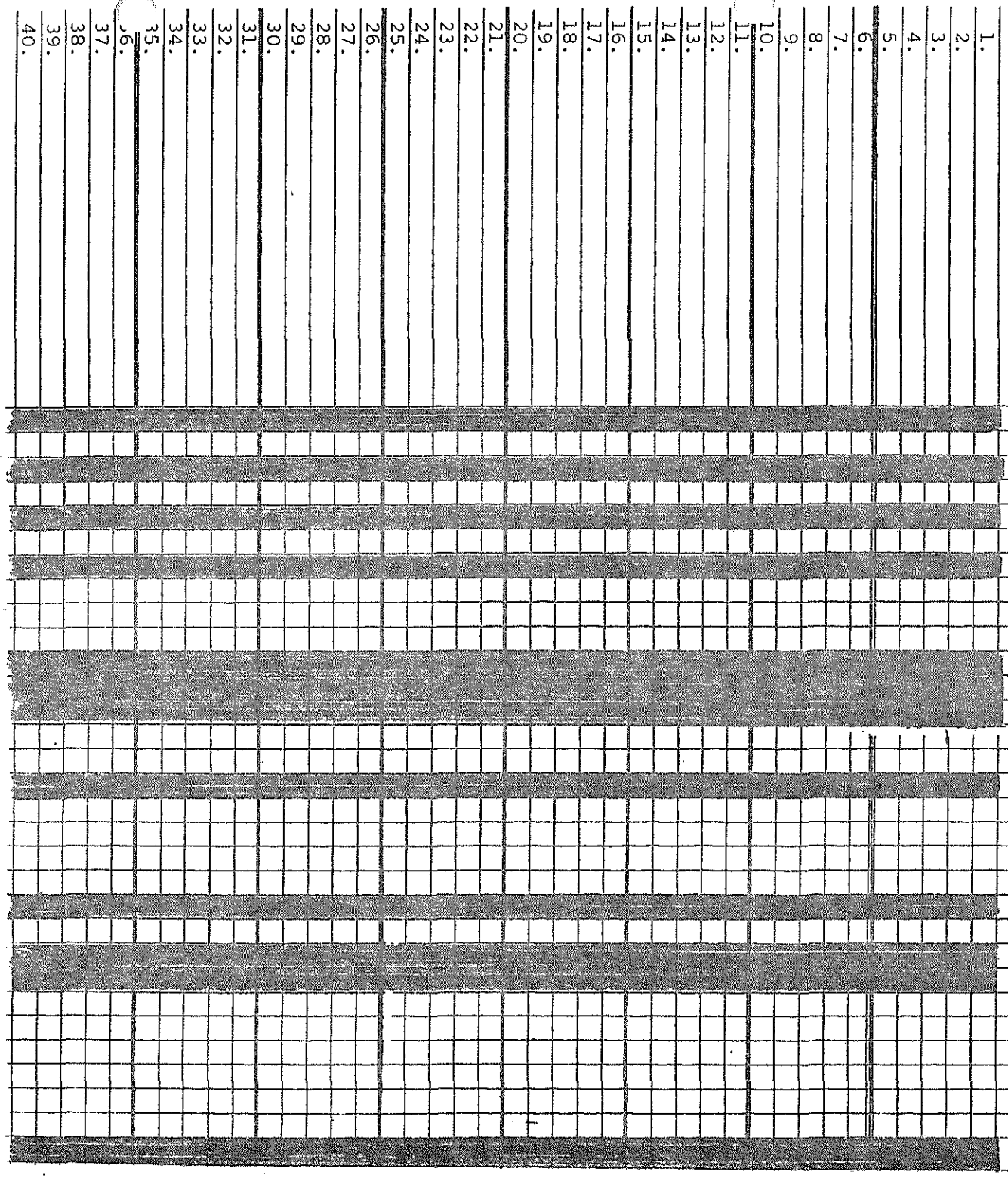
K-M-4 Identify above
below

K-M-5 Identify under
over

K-M-6 Identify the four basic shapes:
square
triangle
rectangle
circle

K-M-7 Verbalize the function of a clock

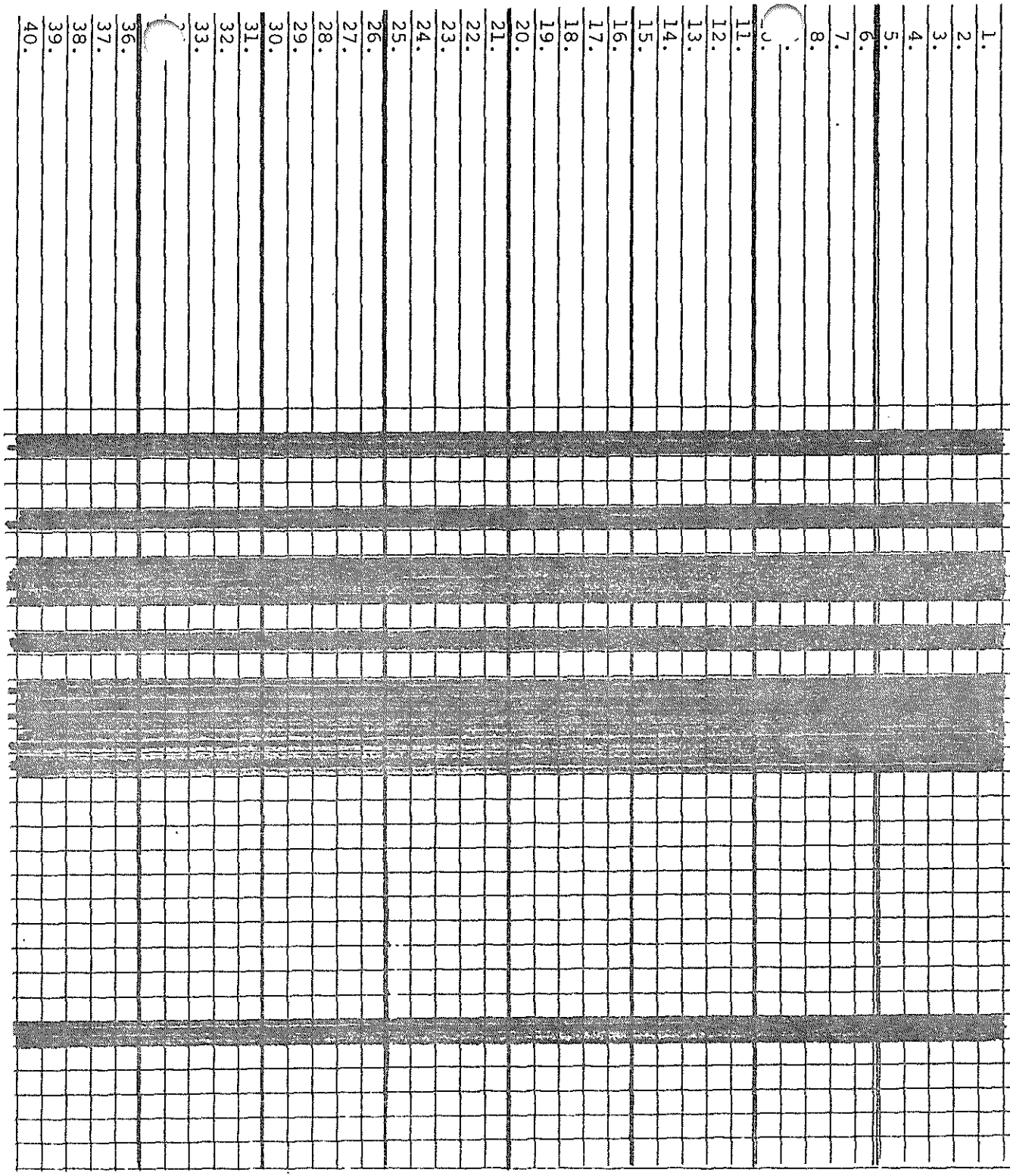
K-M-8 Identify a calendar



CAMAS SCHOOL DISTRICT #117
STUDENT LEARNING OBJECTIVES & INDICATORS

MATHEMATICS
(First Grade)

	COMPUTATION
1-C-1	Solve sums of number combinations through ten
1-C-2	Add three addends with a sum of ten or less
1-C-3	Solve subtraction combinations with minuends through ten
1-C-4	Identify the plus sign
1-C-5	Identify the equal sign
1-C-6	Identify the minus sign
	NUMERATION
1-N-1	Name numerals 0-100 in sequence
1-N-2	Write numerals 0-20 in and out of sequence
1-N-3	Count orally to one hundred by ones
1-N-4	Count orally to one hundred by tens
1-N-5	County orally to fifty by fives
1-N-6	Match a set of picture objects to twenty to the correspond. numeral
1-N-7	Identify one half of a whole
	MEASUREMENT
1-M-1	Tell time to the hour
1-M-2	Identify a penny
1-M-3	Identify a nickel
1-M-4	Identify a dime
1-M-5	Identify a quarter
1-M-6	Read the calender days of the week



CAMAS SCHOOL DISTRICT #117
STUDENT LEARNING OBJECTIVES & INDICATORS

MATHEMATICS
(Second Grade)

COMPUTATION

2-C-1 Write addition facts one through 20

2-C-2 Write a dictated problem in correct form vertically

2-C-3 Add two & three one-digit numerals in a column or horizontally up to the sum of twenty

2-C-4 Subtract two-digit numerals without regrouping

2-C-5 Add two-digit numerals without regrouping

NUMERATION

2-N-1 Write to two hundred by ones

2-N-2 Count to one hundred by twos

2-N-3 Count to one hundred by fives

2-N-4 Count to one hundred by tens

2-N-5 Write to one hundred by twos

2-N-6 Write to one hundred by fives

2-N-7 Write to one hundred by tens

2-N-8 Read number words one through ten

2-N-9 Identify one fourth of a whole

2-N-10 Identify one third of a whole

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NAMES

1. 2. 3. 4. 5. 6. 7. 8. 9. 10. 11. 12. 13. 14. 15. 16. 17. 18. 19. 20. 21. 22. 23. 24. 25. 26. 27. 28. 29. 30. 31. 32. 33. 34. 35. 36. 37. 38. 39. 40.

CAMAS SCHOOL DISTRICT #117
STUDENT LEARNING OBJECTIVES & INDICATORS

MATHEMATICS
(Second Grade)

MEASUREMENT

2-M-1	Read time to the half hour
2-M-2	Write time to the half hour
2-M-3	Read the calendar days of the week
2-M-4	Say the calendar months in order
2-M-5	Recognize number of cents in penny
2-M-6	Recognize number of cents in nickel
2-M-7	Recognize number of cents in a dime
2-M-8	Recognize number of cents in quarter
2-M-9	Recognize the dollar sign
2-M-10	Recognize the cent sign
2-M-11	Identify that twelve inches equals one foot
2-M-12	Measure to the nearest inch up to twelve inches

NAMES

1. 2. 3. 4. 5. 6. 7. 8. 9. 10. 11. 12. 13. 14. 15. 16. 17. 18. 19. 20. 21. 22. 23. 24. 25. 26. 27. 28. 29. 30. 31. 32. 33. 34. 35. 36. 37. 38. 39. 40.

CAMAS SCHOOL DISTRICT #117
STUDENT LEARNING OBJECTIVES & INDICATORS

MATHEMATICS
(Fourth Grade)

COMPUTATION	
4-C-1	Add four-digit numerals in columnar form
4-C-2	Subtract four-digit numerals in columnar form
4-C-3	Change addition number sentences to columnar form
4-C-4	Change subtraction number sentences to columnar form
4-C-5	Name multiplication facts through nine times nine
4-C-6	Write multiplication facts through nine times nine
4-C-7	Name division facts through nine times nine
4-C-8	Write division facts through nine times nine
4-C-9	Divide using one-digit numbers with remainders where the quotient is one digit with a remainder
4-C-10	Multiply one-digit numerals times two-digit numerals
4-C-11	Match or identify fractions to corresponding pictures
4-C-12	Add fractions with like denominators
4-C-13	Subtract fractions with like denominators
4-C-14	Compare fractions that have a numerator of 1 for their >, <, = qualities

NAMES

1. 2. 3. 4. 5. 6. 7. 8. 9. 10. 11. 12. 13. 14. 15. 16. 17. 18. 19. 20. 21. 22. 23. 24. 25. 26. 27. 28. 29. 30. 31. 32. 33. 34. 35. 36. 37. 38. 39. 40.

CAMAS SCHOOL DISTRICT #117
STUDENT LEARNING OBJECTIVES & INDICATORS

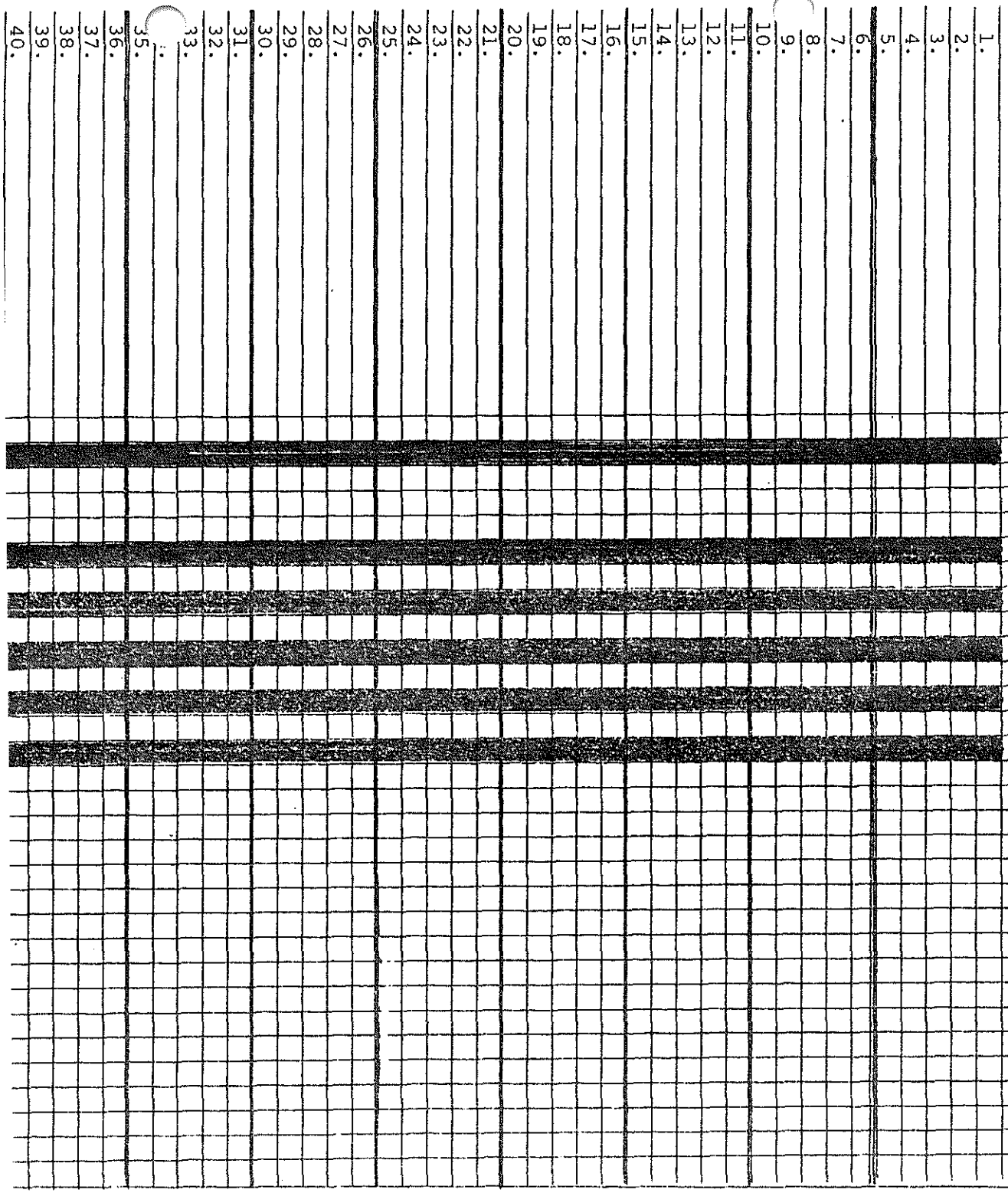
MATHEMATICS
(Third Grade)

COMPUTATION

3-C-1	Add three-digit numerals with regroup
3-C-2	Write addition facts zero through twenty
3-C-3	Add using money
3-C-4	Subtract a three-digit numeral with regrouping
3-C-5	Write subtraction facts zero through twenty
3-C-6	Subtract using money
3-C-7	Write multiplication facts through fives
3-C-8	Write division facts through fives

NUMERATION

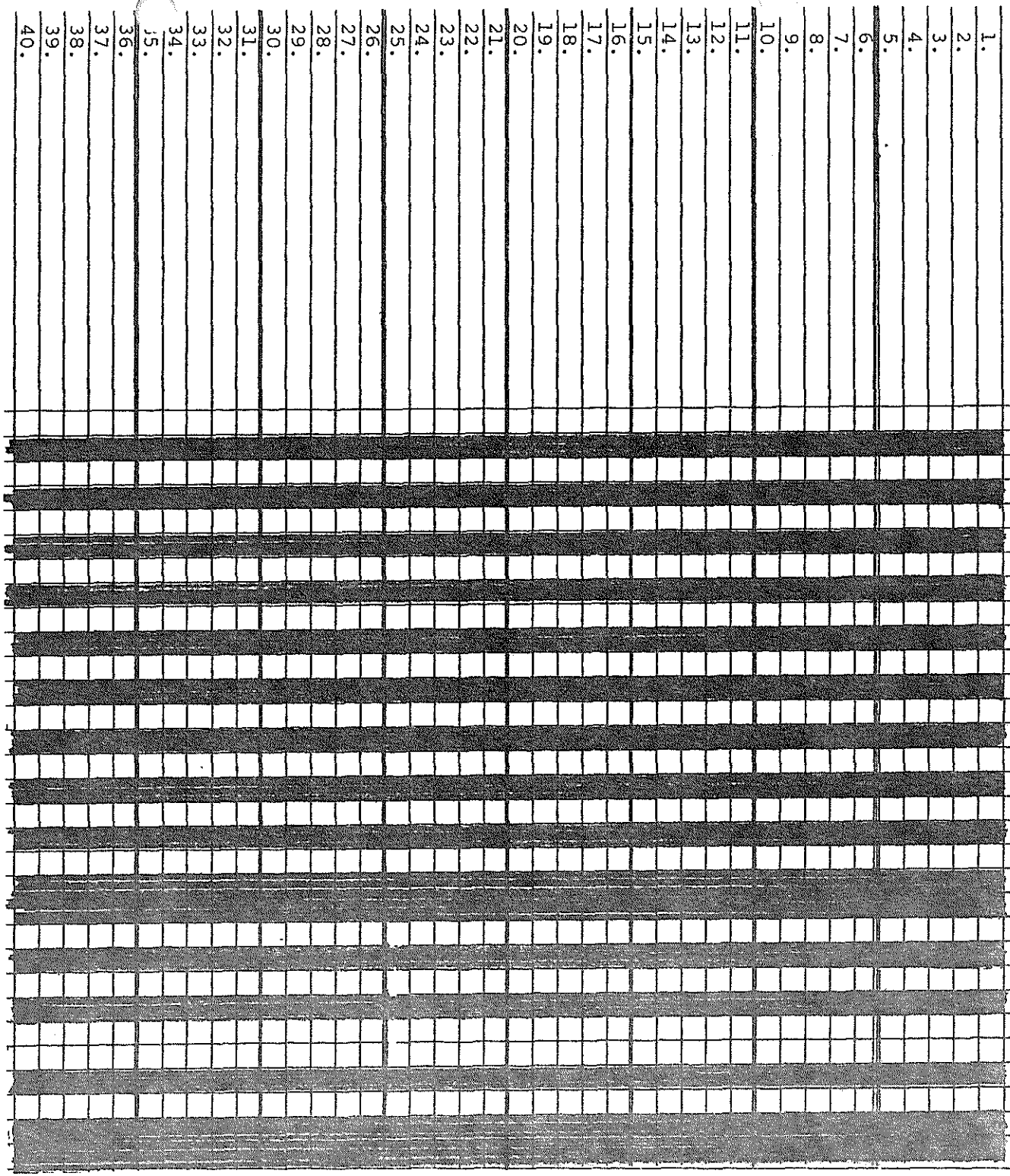
3-N-1	Read whole numbers through one thous.
3-N-2	Write whole nos. through one thous.
3-N-3	Read one half of a whole
3-N-4	Read one fourth of a whole
3-N-5	Read one third of a whole
3-N-6	Write one half of a whole
3-N-7	Write one fourth of a whole
3-N-8	Write one third of a whole
3-N-9	Identify place value to hundredths



CAMAS SCHOOL DISTRICT #117
STUDENT LEARNING OBJECTIVES & INDICATORS

MATHEMATICS
(Third Grade)

MEASUREMENT	
3-M-1	Tell time to the nearest quarter hr.
3-M-2	Indicate the numerical value of a day
3-M-3	Indicate numerical value of days in a week
3-M-4	Indicate numerical value of days in a month
3-M-5	Indicate numerical value of weeks in a month
3-M-6	Measure to the nearest half inch on a ruler
3-M-7	Measure to the nearest quarter inch on a ruler



CAMAS SCHOOL DISTRICT #117
STUDENT LEARNING OBJECTIVES & INDICATORS

MATHEMATICS
(Fourth Grade)

COMPUTATION

4-C-1	Add four-digit numerals in columnar form
4-C-2	Subtract four-digit numerals in columnar form
4-C-3	Change addition number sentences to columnar form
4-C-4	Change subtraction number sentences to columnar form
4-C-5	Name multiplication facts through nine times nine
4-C-6	Write multiplication facts through nine times nine
4-C-7	Name division facts through nine times nine
4-C-8	Write division facts through nine times nine
4-C-9	Divide using one-digit numbers with remainders where the quotient is one digit with a remainder
4-C-10	Multiply one-digit numerals times two-digit numerals
4-C-11	Match or identify fractions to corresponding pictures
4-C-12	Add fractions with like denominators
4-C-13	Subtract fractions with like denominators
4-C-14	Compare fractions that have a numerator of 1 for their qualities

NAMES

1. 2. 3. 4. 5. 6. 7. 8. 9. 10. 11. 12. 13. 14. 15. 16. 17. 18. 19. 20. 21. 22. 23. 24. 25. 26. 27. 28. 29. 30. 31. 32. 33. 34. 35. 36. 37. 38. 39. 40.

CAMAS SCHOOL DISTRICT #117
STUDENT LEARNING OBJECTIVES & INDICATORS

MATHEMATICS
(Fourth Grade)

NUMERATION

4-N-1 Read numbers through one million

4-N-2 Write numbers through one million

MEASUREMENT

4-M-1 Express time to the nearest minute including terms a.m. and p.m.

4-M-2 Count change up to and including one dollar

4-M-3 Make change up to and including one dollar

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NAMES

1. 2. 3. 4. 5. 6. 7. 8. 9. 10. 11. 12. 13. 14. 15. 16. 17. 18. 19. 20. 21. 22. 23. 24. 25. 26. 27. 28. 29. 30. 31. 32. 33. 34. 35. 36. 37. 38. 39. 40.

CAMAS SCHOOL DISTRICT #117
STUDENT LEARNING OBJECTIVES & INDICATORS

MATHEMATICS
(Fifth Grade)

	COMPUTATION
5-C-1	Add fractions with unlike denominators up to a denominator of 12
5-C-2	Subtract fractions with unlike denominators up to a denominator of 12
5-C-3	Use multiplication facts through twelve times twelve
5-C-4	Use division facts through twelve times twelve
5-C-5	Check simple division problems with multiplication
5-C-6	Find equal fractions (renaming)
	NUMERATION
5-N-1	Identify place value through one million
	MEASUREMENT
5-M-1	Recognize a point
5-M-2	Recognize a line
5-M-3	Recognize a line segment
5-M-4	Recognize a ray
5-M-5	Recognize an angle
5-M-6	Recognize congruent figures
5-M-7	Recognize similar figures
5-M-8	Recognize parallel lines
5-M-9	Recognize intersecting lines
5-M-10	Recognize perpendicular lines

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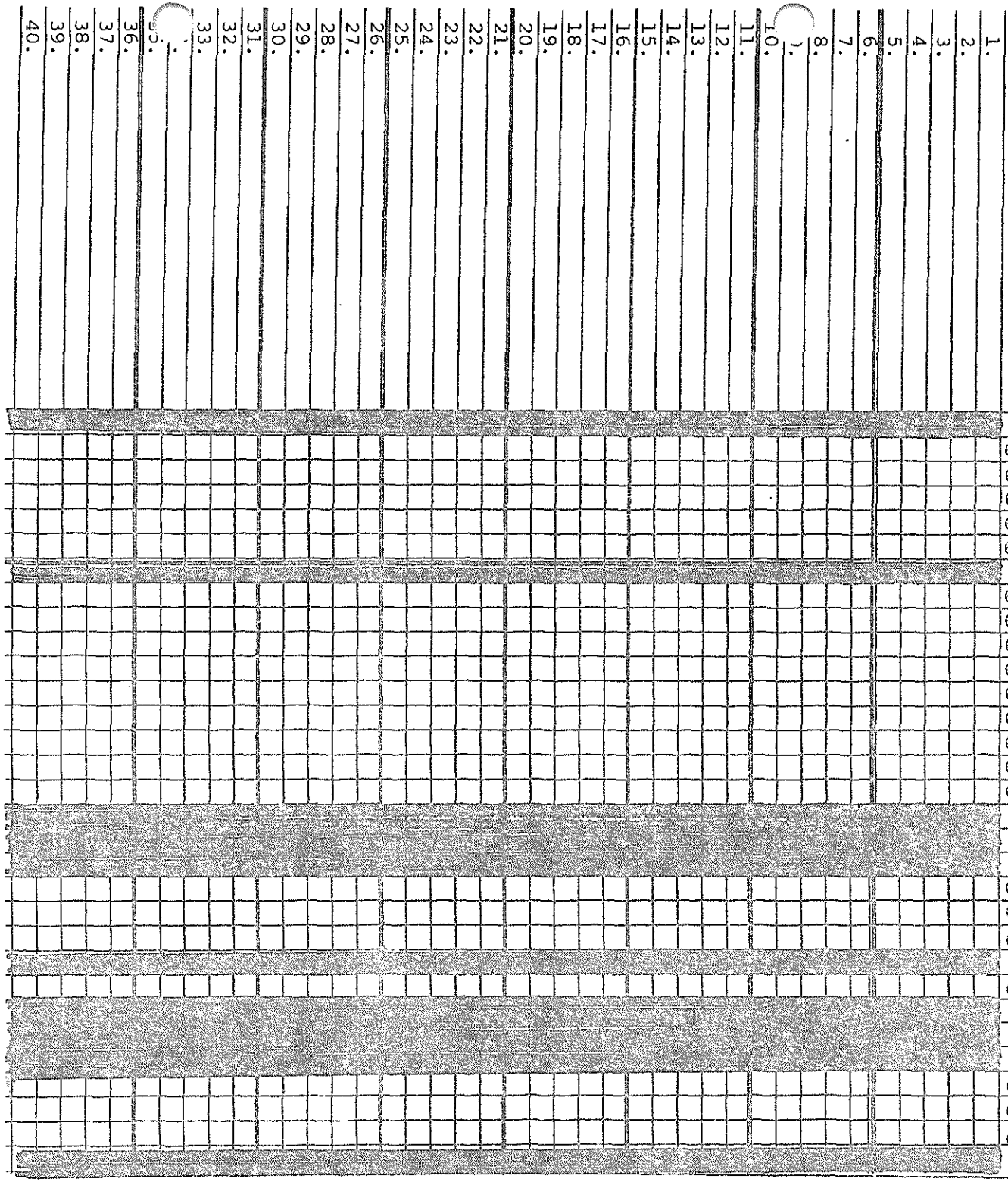

CAMAS SCHOOL DISTRICT #117
STUDENT LEARNING OBJECTIVES & INDICATORS

MATHEMATICS
(Sixth Grade)

	COMPUTATION
6-C-1	Add columns of five-digit numerals
6-C-2	Add fractions
6-C-3	Add mixed numbers
6-C-4	Add decimals
6-C-5	Subtract five-digit numerals including regrouping
6-C-6	Subtract fractions
6-C-7	Subtract mixed numbers
6-C-8	Multiply three-digit numerals
6-C-9	Multiply fractions
6-C-10	Multiply mixed numbers
6-C-11	Divide using two-digit division
6-C-12	Divide fractions
6-C-13	Divide mixed numbers
6-C-14	Solve proportion problems with one unknown using cross multiplying
	NUMERATION
6-N-1	Read numerals through one billion
6-N-2	Write numerals through one billion
6-N-3	Recognize place value through one billion
6-N-4	Recognize place value in decimal notation through thousandths
	MEASUREMENT
6-M-1	Measure distance
6-M-2	Measure perimeter
6-M-3	Measure area

REV 11/25/78

NAMES

1. 2. 3. 4. 5. 6. 7. 8. 9. 10. 11. 12. 13. 14. 15. 16. 17. 18. 19. 20. 21. 22. 23. 24. 25. 26. 27. 28. 29. 30. 31. 32. 33. 34. 35. 36. 37. 38. 39. 40.

CAMAS SCHOOL DISTRICT #117
STUDENT LEARNING OBJECTIVES & INDICATORS

MATHEMATICS
(Seventh Grade)

COMPUTATION

7-C-1 Find averages

NUMERATION

7-N-1 Read numbers through ten billion

7-N-2 Write numbers through ten billion

7-N-3 Recognize fractional equivalents in fractions

7-N-4 Recognize fractional equivalents in decimals

7-N-5 Recognize fractional equivalents in percentages

7-N-6 Demonstrate use of symbols: = ≠ < >

7-N-7 Demonstrate properties of ratios by using ratio problems

7-N-8 Round numbers to nearest one hundred thousand in whole numbers

7-N-9 Round numbers to nearest thousandths in decimals

7-N-10 Estimate answers in decimals

7-N-11 Estimate answers in story problems

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NAMES

1. 2. 3. 4. 5. 6. 7. 8. 9. 10. 11. 12. 13. 14. 15. 16. 17. 18. 19. 20. 21. 22. 23. 24. 25. 26. 27. 28. 29. 30. 31. 32. 33. 34. 35. 36. 37. 38. 39.

CAMAS SCHOOL DISTRICT #117
STUDENT LEARNING OBJECTIVES & INDICATORS

MATHEMATICS
(Seventh Grade)

MEASUREMENT	
7-M-1	Use formulas to find perimeters of any polygon
7-M-2	Use formulas to find area of circles
7-M-3	Use formulas to find area of polygons
7-M-4	Use formulas to find surface area of prisms

REV 11-25-78

NAMES

1. 2. 3. 4. 5. 6. 7. 8. 9. 10. 11. 12. 13. 14. 15. 16. 17. 18. 19. 20. 21. 22. 23. 24. 25. 26. 27. 28. 29. 30. 31. 32. 33. 34. 35. 36. 37. 38. 39. 40.

CAMAS SCHOOL DISTRICT #117
STUDENT LEARNING OBJECTIVES & INDICATORS

MATHEMATICS
(Eighth Grade)

COMPUTATION

8-C-1 Add integers

8-C-2 Subtract integers

8-C-3 Multiply integers

8-C-4 Divide integers

8-C-5 Solve equations with one unknown

NUMERATION

8-N-1 Recognize fractional equivalents in fractions (e.g. one half, one third, two thirds, one fourth, three fourths, one fifth, one tenth)

8-N-2 Recognize fractional equivalents in decimals (e.g. one half, one third, two thirds, one fourth, three fourths, one fifth, one tenth)

8-N-3 Recognize fractional equivalents in percentages (e.g. one half, one third, two thirds, one fourth, three fourths, one fifth, one tenth)

MEASUREMENT

8-M-1 Use formulas to find perimeters of any polygon

8-M-2 Use formulas to find area of circles

8-M-3 Use formulas to find area of polygons

8-M-4 Use formulas to find surface area of prisms

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CONCLUSION

An effective educational process must constantly undergo changes, additions, deletions and improvements to parallel students' needs. Thus, this document is not a binding or concrete set of objectives but a flexible model designed to aid in future growth and development of the Mathematics Curriculum in Camas.

The Camas School District, Mathematics Curriculum, Student Learning Objectives (K-8) were written in response to the Student Learning Objectives Law, RCW 28A.58.090. The state's intent of community, staff and student involvement was met. The guide contains the objectives and indicators which at that time best reflected the core of the Camas Mathematics Program K-8. This guide also contains classroom and formal reporting forms.

The guide has been used for two successive school years and it is felt at this time it would be beneficial to collect feedback from the staff, consider necessary additions and deletions of skills, and interpretation of indicators. After the necessary changes in wording and skills have been made, the committee will be considering the possibility of entering into a consortium to form a bank of evaluation procedures.