

GRADE 3: REPRESENT NUMBERS (#1)

Objective assessed in this category:

- ✓ Represent and describe numbers to 1000, concretely, pictorially and symbolically

a. Circle the number **fifty**. 15 50 55

b. Write the number that comes **AFTER**.

792 _____ 240 _____ 811 _____ 576 _____

c. These blocks represent the number:



- a. three hundred forty-seven b. four hundred three
c. four hundred seventy-three d. four hundred thirty-seven

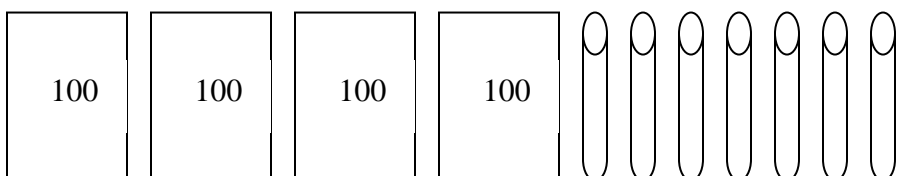
d. Write the words for this number: **80**

e. Miss Smith said "I have **six hundred thirty-four** chapter books at home."
Which expanded form shows that number?

- a. $600+30+4$ b. $600+3+4$ c. $60+30+4$ d. $60+34$

f. How many digits are there in the number **four hundred**?

g. How many straws are there?



GRADE 3: PLACE VALUE (#2)

Objectives assessed in this category:

- ✓ Compare and order numbers to 1000
- ✓ Illustrate, concretely and pictorially, the meaning of place value for numerals to 1000

a. Underline the digit in the **TENS** place in each number.

845

920

352

395

821

582

b. Write the number that is **10 more**.

784 _____

438 _____

359 _____

712 _____

c. Circle the number in each box that is **GREATER**.

836 863

493 394

217 271

648 649

d. What number is shown by these blocks?

Write it in expanded notation.



e. What is the value of the 7 in 729?

f. Put these numbers in order from **GREATEST** to **LEAST**.

325

476

982

335

523

g. Write the place value of the 5 in each number. (ones, tens or hundreds)

457 _____



534 _____

GRADE 3: COUNTING (#3)

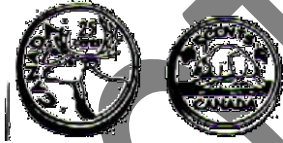
Objective assessed in this category:

- ✓ Say the number sequence forward and backward from 0 to 1000 by:
 - 5s, 10s or 100s using any starting point
 - 3s using starting points that are multiples of 3
 - 4s using starting points that are multiples of 4
 - 25s using starting points that are multiples of 25

a. Keep counting. 345, 350, 355, _____

b. 281, 381, 481, 581, 681
I am counting   (circle an arrow) by _____

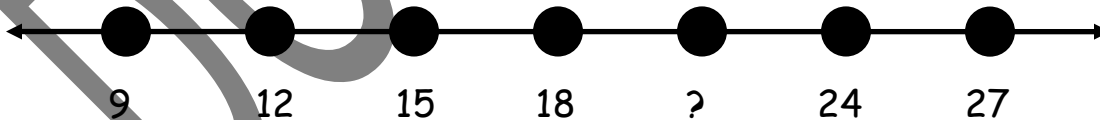
c. Under the coins, write the numbers you would say as you count them.



d. What number will come next in this pattern? 240, 250, 260

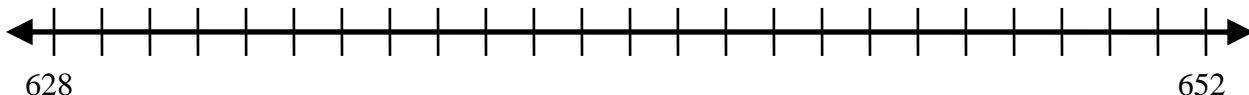
- a. 280 b. 240 c. 270 d. 230

e. Each dot should have a number. What number should the question mark be?



f. Count by 25's up to 100. _____

g. Use the number line to count on by 4's, starting at 628 and ending at 652.



GRADE 3: ESTIMATION (#4)

Objective assessed in this category:

- ✓ Estimate quantities less than 1000 using referents

a. If there are 10 candies in the small, white tube, about how many groups of 10 would there be in the long, black tube?



b. If there are about 20 students in your class, estimate the number of students in your school.

c. Why is using a referent helpful when estimating?

d.



There are 10 stickers on the part of this sheet that we can see. About how many would be on the whole sheet? _____

e. TEACHER: Show students a full strip of staples and tell them how many there are. Then show them 3 full strips and a partial strip of staples.

Estimate the number of staples in the strips the teacher is showing you.

f. TEACHER: Show students a half full cup of pennies and tell them how many there are. About how many pennies would it take to fill this cup?

GRADE 3: ADD & SUBTRACT (#5)

Objectives assessed in this category:

- ✓ Describe and apply mental mathematics strategies for adding two 2-digit numerals, such as:
 - adding from left to right
 - taking one addend to the nearest multiple of 10 and then compensating
 - using doubles
- ✓ Describe and apply mental mathematics strategies for subtracting two 2-digit numerals, such as:
 - taking the subtrahend to the nearest multiple of ten and then compensating
 - thinking of addition
 - using doubles
- ✓ Apply estimation strategies to predict sums and differences of two 2-digit numbers in a problem solving context
- ✓ Demonstrate an understanding of addition and subtraction of numbers with answers to 1000 (limited to 1, 2 and 3-digit numerals) by:
 - using personal strategies for adding and subtracting with and without the support of manipulatives
 - creating and solving problems in contexts that involve addition and subtraction of numbers concretely, pictorially and symbolically
- ✓ Apply mental mathematics strategies and number properties, such as:
 - using doubles
 - making 10
 - using the commutative property
 - using the property of 0
 - thinking addition for subtractionto recall basic addition facts to 18 and related subtraction facts

a. Which subtraction fact belongs in the same family as $6 + 8$?

a. $8 - 6$

b. $6 - 8$

c. $14 - 6$

d. $10 - 8$

b. What is the fact that shows the commutative property for $7 + 9$?

c. Write a rule for subtracting 0. Write a rule for adding 0.

GRADE 3: MULTIPLY & DIVIDE (#6)

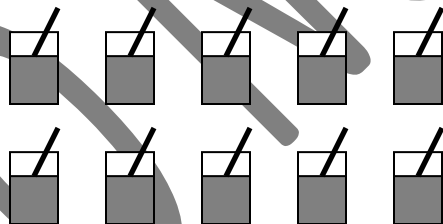
Objectives assessed in this category:

- ✓ Demonstrate an understanding of multiplication to 5×5 by:
 - representing and explaining multiplication using equal grouping and arrays
 - creating and solving problems in context that involve multiplication
 - modelling multiplication using concrete and visual representations, and recording the process symbolically
 - relating multiplication to repeated addition
 - relating multiplication to division
- ✓ Demonstrate an understanding of division by:
 - representing and explaining division using equal sharing and equal grouping
 - creating and solving problems in context that involve equal sharing and equal grouping
 - modelling equal sharing and equal grouping using concrete and visual representations, and recording the process symbolically
 - relating division to repeated subtraction
 - relating division to multiplication

(limited to division related to multiplication facts up to 5×5)

a. The product is the answer when you _____.

b. There are 10 glasses of juice on the table. You can carry 2 at a time. How many trips do you need to make?



c. Write the multiplication number sentence to go with this picture.



d. The quotient is the answer when you _____.

GRADE 3: FRACTIONS (#7)

Objective assessed in this category:

- ✓ Demonstrate an understanding of fractions by:
 - explaining that a fraction represents a part of a whole
 - describing situations in which fractions are used
 - comparing fractions of the same whole with like denominators

a. Circle the shapes that have **equal** parts.



b. Circle the numerator in each fraction:

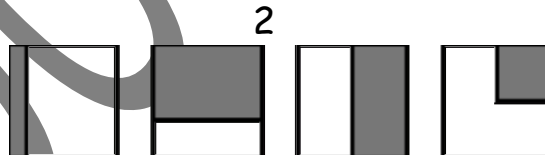
$$\frac{4}{8} \quad \frac{8}{10} \quad \frac{2}{3}$$

c. How many pieces are there when you cut an object in half?

d. Circle the shape that is divided into equal halves.



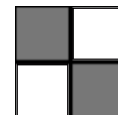
e. Circle the shape that shows $\frac{1}{2}$ shaded.



f. Draw lines to cut this square into 4 equal parts.



g. Write the fraction for the shaded part of this shape.



GRADE 3: PATTERNS (#8)

Objectives assessed in this category:

- ✓ Demonstrate an understanding of increasing patterns by:

- describing
- extending
- comparing
- creating

patterns using manipulatives, diagrams, sounds and actions (numbers to 1000)

- ✓ Demonstrate an understanding of decreasing patterns by:

- describing
- extending
- comparing
- creating

patterns using manipulatives, diagrams, sounds and actions (numbers to 1000)

a. What is my rule?

IN	OUT
5	1
10	6
18	14

b. There are 5 numbers. What are the next 2 numbers?

121

232

343

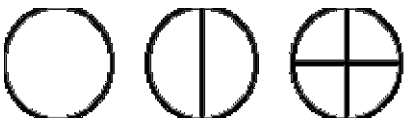
454

 ?

 ?

c. Continue the pattern.

Z, V, R, N, _____, _____, _____

d.  _____

Continue this pattern 2 more times.

GRADE 3: EQUATIONS (#9)

Objective assessed in this category:

- ✓ Solve one-step addition and subtraction equations involving symbols representing and unknown number

a. In the equation $8 - x = 2$, what is the x ?

- a. the unknown
- b. what you have to find out
- c. a symbol
- d. all of the above

b. Fill in the blanks.

$$2 + \underline{\quad} = 9$$

$$\underline{\quad} + 4 = 7$$

c. Draw a picture for each.

$$\underline{\quad} - 4 = 12$$

$$7 + \underline{\quad} = 13$$

d. At Jaydon's birthday party, his Mom had 25 treats. She had given out 8 of them. How many are left to be given out?

Write the equation and be sure to use a symbol to represent the number left to be given out.

e. True or false?

$$8 + 4 = 12$$

$$7 + 2 = 3 + 6$$

$$14 = 8 + 8$$

$$12 - 2 = 5 + 5$$

T F

T F

T F

T F

f. A statement that 2 things are equal is also known as:

- a. an equation
- b. an unknown
- c. a fact
- d. an estimate

g. Fill in the blanks.

$$\underline{\quad} - 7 = 4$$

$$10 - \underline{\quad} = 5$$

GRADE 3: TIME (#10)

Objectives assessed in this category:

- ✓ Relate the passage of time to common activities using non-standard and standard units (minutes and hours)
- ✓ Relate the number of seconds to a minute, the number of minutes to an hour in a problem solving context

a. Can you run for one full day? **Yes** or **No**

Can you drink a small glass of milk in 10 seconds? **Yes** or **No**

Can an adult read for 1 hour? **Yes** or **No**

b. Circle the activity that takes the most time.

Tieing 1 shoe A song on the radio Writing your name

c. Circle the best unit to use to measure each activity.

Tie one shoe lace → Songs on the radio OR snaps of the fingers

Making a sandwich → Recesses OR saying the alphabet

d. Circle the best estimate for each activity.

Playing a game of checkers → 1 TV commercial OR 4 TV commercials

Making your bed → 1 song on the radio OR saying your name

e. Circle the activity that takes the least time.

Brushing your teeth properly Singing "O Canada"

Doing 25 jumping jacks Clapping your hands twice

f. How many **minutes** in an **hour**?

GRADE 3: CALENDAR (#11)

Objectives assessed in this category:

- ✓ Relate the passage of time to common activities using non-standard and standard units (days, weeks, months, years)
- ✓ Relate the number of days to a month in a problem solving context

a. How many days are in the month of July? _____

July

				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

b. What day of the week will August 1st be on?

July

	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			

c. Circle the time that is shorter:

- 3 weeks OR 1 month
1 year OR 14 days
February OR December

d. If today is Wednesday, October 3, 2002, what will the date be in 2 weeks?
Write the whole date.

GRADE 3: MEASUREMENT (#12)

Objectives assessed in this category:

- ✓ Demonstrate an understanding of measuring length (cm, m) by:
 - selecting and justifying referents for the units cm and m
 - modelling and describing the relationship between the units cm and m
 - estimating length using referents
 - measuring and recording length, width and height
- ✓ Demonstrate an understanding of measuring mass (g, kg) by:
 - selecting and justifying referents for the units g and kg
 - modelling and describing the relationship between the units g and kg
 - estimating mass using referents
 - measuring and recording mass
- ✓ Demonstrate an understanding of perimeter of regular and irregular shapes by:
 - estimating perimeter using referents for centimetre or metre
 - measuring and recording perimeter (cm, m)
 - constructing different shapes for a given perimeter (cm, m) to demonstrate that many shapes are possible for a perimeter

a. If I was measuring the length of the book shelf, which tool should I use?

- a. a cup b. a thermometer c. a scale d. a meter stick

b. Circle the units that refer to mass.

- cm kg g m

c. Estimate which is greater--the perimeter of your desktop or the height of your desk. Tell why you think so.

d. Draw a line that is 13 cm long using a ruler.

e. Which object has the largest perimeter (distance around)?

- a. classroom window b. seat of your chair
c. dictionary cover d. computer screen

GRADE 3: GEOMETRY (#13)

Objectives assessed in this category:

- ✓ Describe 3-D objects according to the shape of the faces, and the number of edges and vertices
- ✓ Sort regular and irregular polygons, including:
 - triangles
 - quadrilaterals
 - pentagons
 - hexagons
 - octagonsaccording to the number of sides

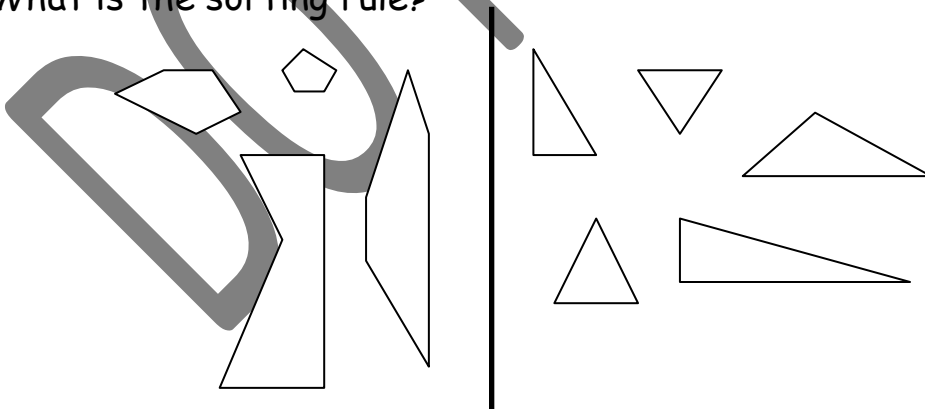
a. Draw a shape that has 6 sides. What is its name? _____

b. Which 3-D solid has 6 square faces?

c. A polygon can have curved sides. TRUE FALSE

d. What kind of face does a cone have? _____ How many? _____

e. What is the sorting rule?



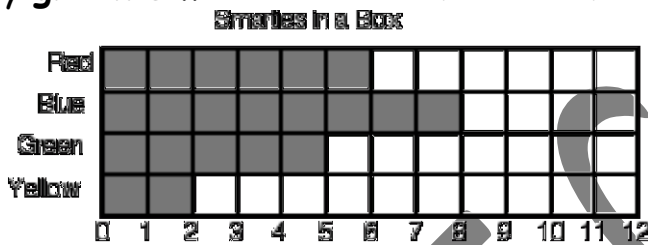
f. Which solid has no faces, vertices or edges?

GRADE 3: GRAPHING & DATA ANALYSIS (#14)

Objectives assessed in this category:

- ✓ Collect first-hand data and organize it using:
 - tally marks
 - line plots
 - charts
 - lists
 to answer questions
- ✓ Construct, label and interpret bar graphs to solve problems.

a. How many **green** Smarties were there in the box?



b. On the way home from the zoo we all counted animals. I made this tally sheet.

Mom	Dad	Den	Sam	Katie	John

What is the total number of tallies?

- a. 30 b. 36 c. 33 d. 31

c. This table shows the distance traveled by some grade 4 students on their summer holidays.

Student	Distance Traveled
Sam	463 km
Quin	279 km
Brent	1 408 km
Carly	700 km
Mikala	857 km

Who traveled farther than Sam?

Who traveled less than Carly?

GRADE 3: PROBLEM SOLVING (#15)

NOTE: The Western and Northern Canadian Protocol Common Curriculum Framework for K-9 Mathematics lists "Problem Solving" as one of the *"critical components that students must encounter in a mathematics program in order to achieve the goals of mathematics education and encourage lifelong learning in mathematics."* (Crown in Right of the Government of Alberta, British Columbia, Manitoba, Northwest Territories, Nunavut Territory, Saskatchewan and Yukon Territory, 2006, p. 6) The questions in this section are not linked to specific outcomes. These questions are designed to allow students the chance to demonstrate their ability to reason and justify their mathematical thinking and as such, most have more than one way to come up with an answer.

a. What number am I?

I am greater than 25 but less than 40. You say me when you count by 5's. You also say me when you count by 10's. What number am I?

a. 25

b. 30

c. 35

d. 40

b. 4 children line up. Joe is first in line. Sue is in front of Bill. Amy is in front of Sue. Write the children's names in the order in which they are standing in line.

Front of line

Back of line

c. Jessica has 5 toys on her top shelf. She has twice as many toys plus 1 more on her bottom shelf. How many toys does Jessica have altogether?

d. Mary has 4 coins that equal 30 cents. What are the 4 coins?

e. Nicole was given 2 bags of cookies. She had 14 cookies altogether. One bag had 4 more cookies than the other bag. How many cookies were in each bag?