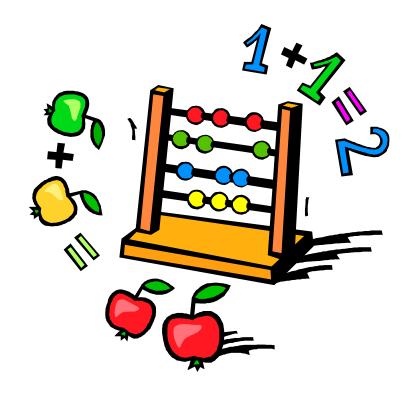
End of Grade 4 I.R.P.

Beginning of Grade 5

Diagnostic Math Assessment

Last updated: June 26, 2007







1) Juice costs \$1.25 for one carton.

How much will three cartons of juice cost?

- A \$2.50
- B \$3.25
- C \$3.75
- D \$4.75





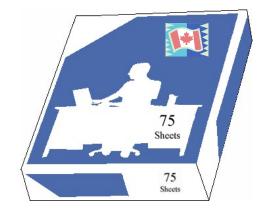


2) A package of paper has 75 sheets.

There are three students.

How many sheets of paper will each student get if the package is shared equally?

- A 22
- B 25
- C 72
- D 78



3) What is the value of the underlined digit?

3 <u>3</u> 3 3

- A Three
- B Thirty
- C Three hundred
- D Three thousand

- 4) What is the largest number that can be made using the digits?
 - A 4762
 - B 6742
 - C 7 462
 - D 7 642

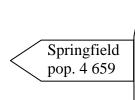
- 6
- 2

7

4

- 5) What is the numeral for nine thousand six hundred two?
 - A 6290
 - B 9 260
 - C 9 602
 - D 9 620

- 6) Smallville has 3 482 people.
 Springfield has 4 659 people.
 What is the total population of both cities?
 - A 7 131
 - B 7 141
 - C 8 131
 - D 8 141



Smallville pop. 3 482

- 7) Mr. Rennie's class read 6 808 books.
 - Mrs. Nelson's class read 5 764.

How many more books did Mr. Rennie's class read than Mrs. Nelson's class?

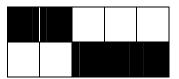
- A 1 044
- B 1064
- C 1164
- D 2572



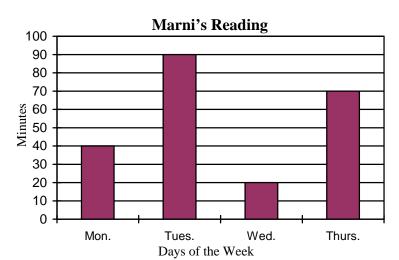
- 8) Which fraction of the diagram is black?
 - $A \quad \frac{1}{5}$
 - $B \quad \frac{1}{4}$
 - $C = \frac{1}{3}$
 - D $\frac{4}{5}$



- 9) What part of the diagram is black?
 - A 0.2
 - B 0.3
 - C 0.5
 - D 0.8



10) The graph below shows how many minutes Marni read in one week. On which day did she read 70 minutes?



- A Monday
- B Tuesday
- C Wednesday
- D Thursday
- 11) How would you write 0.25 as a fraction?

A
$$\frac{25}{1}$$

B
$$\frac{25}{10}$$

$$C = \frac{25}{100}$$

$$D \quad \frac{1}{25}$$

12) 12, 8, 11, 7, __, __,

What are the next 3 numbers in this pattern?

- 13) There are 20 hockey sticks at a bench.
 - Every fourth stick is yellow.

How many yellow sticks are there?

- A 4
- B 5
- C 6
- D 7



14) Alex buys this lunch.



About how much will he spend?

- A \$6.00
- B \$7.00
- C \$7.50
- D \$8.00
- 15) Gurdit had some jelly beans.

He gave 14 to Lee.

Gurdit had 20 left.

How many did he have to start with?

Which equation best represents this problem?

A
$$20 - x = 14$$

B
$$20-14=x$$

$$C x - 20 = 14$$

D
$$x-14=20$$

16) A slice of pizza costs \$2.75.

Paul buys two slices of pizza.

How much change should he get back from a \$10 bill?

- A \$4.50
- B \$5.50
- C \$6.00
- D \$7.25



17) There are 18 hockey cards in a box.

How many hockey cards are in 5 boxes?

Which equation best represents this problem?

- A 18 + 5 = n
- B 18-n-5
- C $18 \times 5 = n$
- D $18 \div 5 = n$
- 18) What is the name of this shape?
 - A cube
 - B rectangle
 - C rectangular prism
 - D triangular prism



- 19) What is the same time as 9:00 p.m.?
 - A 0900 h
 - B 1800 h
 - C 1900 h
 - D 2100 h



- 20) What shape below is **not** symetrical??
 - A _____
 - В
 - c (
 - D
- 21) How many different rectangles can you make with 12 square tiles?
 - A 1
 - B 2
 - C 3
 - D 4

22) How many kilometres will Cindy jog in 5 hours?

A 18 km

B 20 km

C 22 km

D 24 km

Cindy's Jog

Hours	Kilometres
1	4
2	8
3	12
4	16
5	?

23)

September 2006

Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	SS	23	24
25	26	27	28	29	30	-
25	26	27	28	29	30	

The circled date in the calendar can be expressed as:

A 2006/08/20

B 2006/09/20

C 2006/10/20

D 2007/10/20

24) Solve this equation:

$$35 \div x = 7$$

- A 3
- B 4
- C 5
- D 6
- 25) What unit would be best to measure the area of a gym floor?
 - A mm²
 - B cm²
 - $C m^2$
 - $D \text{ km}^2$
- **■** End of Multiple Choice Questions

Problem Solving - Written Response

26) An ice cream stand has five flavours:

Bubble gum Licorice Raspberry Marshmallow Chocolate

Richard would like two different flavours on his ice cream cone.

Show all the possible combinations.



27) Construct a bar graph showing students' favourite food.

Favourite Food

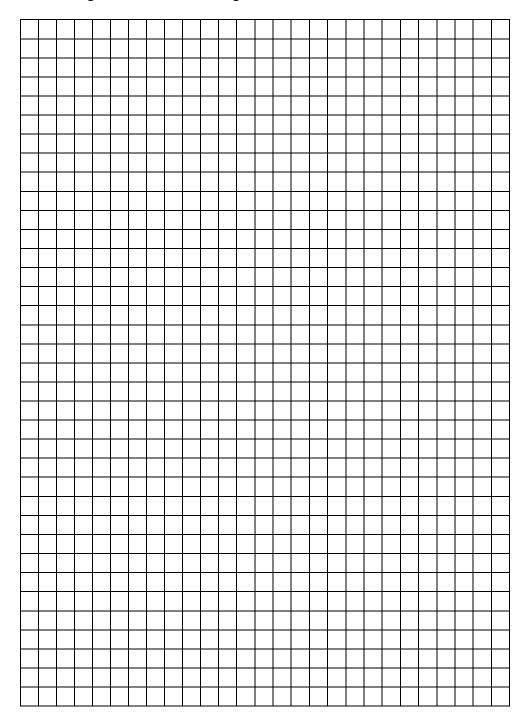
Food	# of Students
Hot dogs	16
Hamburgers	12
Pizza	9
Subs	11

Include a title, labels and scale on your graph.

28) A garden has an area of 36 m^2 .

Draw all of the different $\underline{\mathbf{square}}$ or $\underline{\mathbf{rectangles}}$ the garden could be.

Label the length and width on each garden



Richelle bought four stickers.				
List all the different combinations she can buy.				

29) There are red stickers and green stickers.

BASIC MATH COMPUTATION from Grade 4

158 - 35 =	235 - 16 =	607 - 32 =	1 756 + 169 =
789 + 276 =	2 604 - 437 =	235 + 465 + 20 =	8 x 7 =
4 x 3 x 9 =	34 x 2 =	56 x 5 =	129 x 8 =
40 ÷ = 8	96 ÷ 3 =	26 ÷ 5 =	45 ÷ 4 =

Answer Key

Strand

- 1. C (Number) Operations
- 2. B (Number) Division
- 3. C (Number) Place value
- 4. D (Number) Compare and Order
- 5. C (Number) Numeral to word form
- 6. D (Number) Addition
- 7. A (Number) Subtraction
- 8. A (Number) Fractions
- 9. C (Number) Decimal
- 10. D (Statistics & Probability) Data Analysis
- 11. C (Statistics & Probability) Dec. to Fract.
- 12. B (Number) Pattern extending
- 13. B (Number) Division

- 14. B (Number) Estimation
- 15. D (Patterns) Equation
- 16. A (Number) Money
- 17. C (Patterns) Equation
- 18. C (Shape & Space) 3-D Recognition
- 19. D (Shape & Space) 24 hr clock
- 20. A (Shape & Space) Symmetry
- 21. C (Shape & Space) Area
- 22. B (Patterns) Predicting/ Charts
- 23. B (Shape & Space) Calendar
- 24. C (Patterns) Equations
- 25. C (Shape & Space) Area

26.	BL	LR	RM	MC
	BR	LM	RC	
	BM	LC		
	BC			

1	2	3	4
A start beyond copying that shows some understanding	• Successfully reached a sub goal (1to 4 combinations)	• Appropriate strategy applied but ignored a condition (e.g., 5 to 8 combinations or doubled a flavour)	• 10 correct combinations or minor error (e.g., repeated 1 or 2 combinations)

- 27. Aspects of the graph:
 - Bars are not touching
 - Title
 - X and Y labels
 - Appropriate scale

1	2	3	4
 A start beyond 	 Successfully 	 Appropriate 	 Completed
copying that	reached a sub goal	strategy	all sub goals
shows some	 Used an appropriate 	applied but	 All aspects
understanding	strategy but not	one aspect	of the graph
	carried out far	of the graph	are correct
	enough (ie. Two	is missing	Minor copy
	aspects of the graph		error
	are missing)		

1	2	3	4
 Draws a rectangle 	 Has 2 correct 	• 3 or 4 correct	 5 correct shapes
	shapes with	shapes with	with dimensions
	correct	dimensions	or
	dimensions	or	 Minor copying
		 Appropriate 	error
		strategy but	
		ignored a	
		condition (e.g.,	
		4 x 9 duplicated	
		as a 9 x 4)	

29. Red Green

0 4
1 3
2 2
3 1
4 0

1	2	3	4
 A start beyond 	 Successfully 	 Appropriate 	• 5 correct
copying that	reaches a sub goal	strategy applied	combinations
shows some	(1 or 2	but ignored a	with clear
understanding	combinations)	condition (3 or 4	strategy
		combinations)	

Basic Math Computations

123	219	575	1 925
1 065	2 167	720	56
108	68	280	1 032
5	32	5.2 or 5 R1 $5\frac{1}{5}$	11.25 11 R1

Quick Scale: Grade 4 Numeracy

This Quick Scale is a summary of the criteria described in detail in the Rating Scale that follows. These criteria may apply at any time of the year, depending when specific skills or concepts are introduced.

Aspect	Not Yet Within Expectations	Meets Expectations (Minimal Level)	Fully Meets Expectations	Exceed Expectations
Snapshot	The student may be unable to complete the task without ongoing help; cannot follow procedures independently.	The work satisfies most basic requirements of the task, but it is <i>flawed or incomplete in some way</i> . The student may need some help.	Work is complete and accurate (may include minor flaws or errors). The student is able to develop a simple extension.	Work is complete, accurate, and efficient. The student may find an alternative or a shortcut, or develop an extension.
Concepts and Applications* recognizing mathematics grade-specific concepts, skills patterns, relationships	 may be unable to identify the basic concepts and procedures needed work is inaccurate or incomplete may need one-to-one support to identify simple patterns and relationships 	 identifies some of the concepts and procedures needed applies most relevant concepts and skills appropriately; some errors or omissions identifies simple patterns and relationships it prompted 9e.g., to make predictions) 	 identifies concepts and procedures needed applies relevant concepts and skills; may be somewhat inefficient or make minor errors. identifies, explains, and uses simple patterns and relationships 	 identifies concepts and procedures needed; may propose alternative solutions applies relevant concepts and skills efficiently; precise identifies, explains, and uses patterns and relationships; may notice subtle patterns
Strategies and Approaches • procedures • estimates to verify solutions	 cannot break the task into stages, steps, or sections unable to verify results or solutions 	 tries to follow instructions; does not check or adjust procedures needs help verify results or solutions 	 structures the task logically; may be inefficient if asked, verifies results or solutions 	 structures the task efficiently may independently verify results or solutions
Accuracy • recording, calculations	may include major errors in recording or calculations	may include some recording or calculation errors; comparisons are generally reasonable	 recording and calculations are generally accurate; may be minor errors 	 accurate recording and calculations, including units, may use mental math
Representation and Communication presenting work constructing charts, diagrams, displays explaining procedures, results	 work may be unclear and confusing may omit or make major errors in tables, charts, displays, diagrams. may be unable to explain procedures and results 	 work may be confusing in places includes most required tables, charts, displays and diagrams; some errors or omissions explanations and conclusions may be incomplete; little mathematical language 	 work is generally clear, easy to follow required tables, charts, graphs, and diagrams are generally accurate; minor errors or omissions offers logical explanations and conclusions; some mathematical language 	 work is clear and easy to follow required tables, charts, graphs, diagrams are accurate and complete offers logical explanations and conclusions; uses mathematical language

* You may want to list key curriculum concepts or skills for a particular task.					

BC Performance Standards: Numeracy