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Linking Assessment & Instruction in Mathematics, PRIMARY YEARS.

All new activities keyed to the Ontario Curiculum Grades 1-8 Mathematics.

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Connect the Mathematical Strands at Dinner Time

In the September, 1998 issue, *The Great Canadian Dinner* theme was introduced. That idea is continued with some interesting activity pages for your class. Thank you for all the delightful submissions.

Invitations "Costing It Out" by **Bruce Jones**. Highland Public School, Cambridge, Ontario (Student Activity page 3)

Your students have completed the *Design an Invitation* from the September issue. This activity page links Problem Solving and Inquiry with Number Sense and Numeration plus the added bonus of self evaluation.

Let the students consider the cost of having their top-notch invitation printed professionally. The activity page includes facts, a calculation space, and the opportunity to evaluate the invitation.

Kim Viveiros, Dickson Public School, Cambridge provides extension work on fractions while appealing to children's appetites for muffins and cookies. ***Fractions and Estimation: Let's Bake*** is followed by open-ended questions that arise in ***Let's Write Some Math***. For these activities, students need to be reminded that halving can mean multiplying by 1/2 or dividing by 2. Doubling means multiplying by 2. Have a sample of the various measuring instruments on hand so students can recognize the quantity stated in the recipe.

Une canadienne célèbre: un canadien célèbre: by **Eda Piraino**, Dickson Public School, Cambridge

Use the super-élève question sheet to write a dialogue (interview style) between your famous Canadian and yourself (the interviewer).

Don't forget your GREETING at the beginning of the interview. Your interview must have ten questions and answers which include the following information:
a) ask when and where she/he was born
b) find out the person's favourite food or colour
c) discover his/her favourite sport
d) what is the favourite school subject

Example: **Moi:** Bonjour Mme Edith Dickson!
Mme Dickson: Bonjour Mlle Piraino.
Moi: Comment ça va?
Mme Dickson: Tres bien, merci.

Peter Banks, Dickson Public School and **Shelly Ridgeway**, Ayr Public School provide ***Problems for Dinner Theme - An Assignment***. These problems are intended to challenge grade 5 and 6 students in the strands Geometry and Spatial Sense, Patterning and Algebra with some Data Management too.

Kathy Sharpe, a recent graduate of York University's Faculty of Education, provides an activity called ***Mice Measurement*** as part of an interdisciplinary unit on mice for grades one and two.

Frances Schatz

Teacher Notes: Mice Measurement by Kathy Sharpe

Non-standard measurement can be made fun for young students by linking it to other areas of the curriculum and working with a partner.

Each pair of students was given a set of 3 laminated mice (1 small, 1 medium and 1 large) cut from patterns provided on page 8 of this issue. The students take turns measuring the lengths of the various mice and recording their findings on a chart as follows:
Length in cm: Little Mouse ____ cm;
Middle Mouse ____cm; Big Mouse ____cm.

Grade 2 students can complete an extra step. Do the chart twice; the first time record a prediction or estimate of length, the second time the actual measurement. Check the actual measurement with the prediction in each case.

Assemble for a discussion of the findings. Discuss the patterns of the responses, ie., compare larger, smaller and expected answer. For grade 2 compare estimates with actual.

Evaluation is primarily through teacher observation as the students are performing the measurement part of the activity and participating in the discussion. Skills to be evaluated could include accuracy of measurement, prediction/estimation, cooperation between partners, and understanding of the concepts of small, medium and large.

I found this lesson required about 10 minutes for measuring activity; the remaining allotted time for discussion and/or displaying data.

INVITATIONS "COSTING IT OUT"

Name _____ Date _____

Facts to Consider

What type of card? Cost given is per invitation.

A low quality, white card stock with black ink is 10¢

B low quality, white card stock any other colour ink is 70¢

C top quality, coloured card stock with black ink is 25¢

D top quality, coloured card stock, any colour ink is $1.75

What style of envelope? Cost given is per envelope.

X plain, white is 7¢

Y plain, any other colour is 8¢

Z pattern print, linen quality, any colour, is 9¢

Remember cost of postage. Any other costs?

Circle your choice of card and your choice of envelope.
Calculate the total cost of having your invitations printed professionally and mailed.

Number of invitations _____ **Card choice:** A B C D **cost** _____ **Envelope choice:** X Y Z **cost** _____

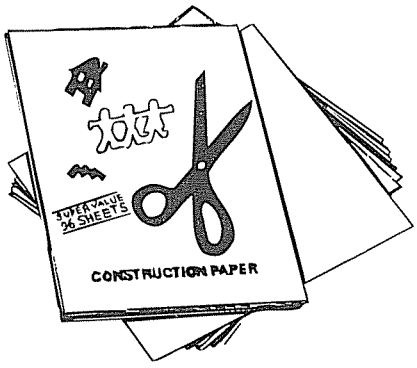
Cost of cards (number) _____ x _____cost/card = _____

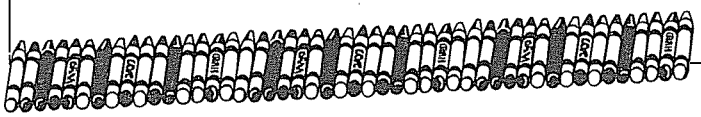
Cost of envelopes _____ x _____cost/envelope = _____

Postage _____ x _____ cost/stamp = _____

Other cost _____ = _____
(name it and include amount)

_____
Total cost





INVITATION EVALUATION

List three things you liked about this type of writing.

_____

_____

_____

State one thing you found difficult about this type of writing.

_____

_____

_____

_____

Describe what you would do differently next time.

_____

_____

_____

_____

Which of the stages of the writing process did you go through when you prepared the invitation. Check.

☐ Outline ☐ Revision

☐ Editing ☐ Second draft

☐ First draft ☐ Final draft

☐ Proofread ☐ Publish

Fractions and Estimation: Let's Bake

Banana Muffins (makes 16 muffins)

3 bananas

2/3 cup melted butter

2 eggs

1/2 cup white sugar

1 1/2 cups flour

1 tsp baking soda

1 tsp baking powder

1/2 tsp salt



My Recipe (for 8 muffins)

You would like to make sugar cookies to share with your class. There are 32 in the class. How will you change the following recipe?

Sugar Cookies (makes 16 cookies)

1 1/2 cups flour

1 1/2 tsp baking powder

1/4 tsp salt

1/2 cup butter

1 egg yolk

1/2 tsp vanilla

3 tbsp milk



My Recipe (for 32 cookies)

Use this space to show your calculations for the above.

Let's Write Some Recipe Math



Please send your problems to *Abacus* Editor

A. A sugar cookie recipe makes 16 cookies. Each cookie costs $0.10 to make.
Write a word problem that would give each of the following answers.

1. The answer is 48. What is the question? _____

_____

2. The answer is $1.05. What is the question? _____

_____

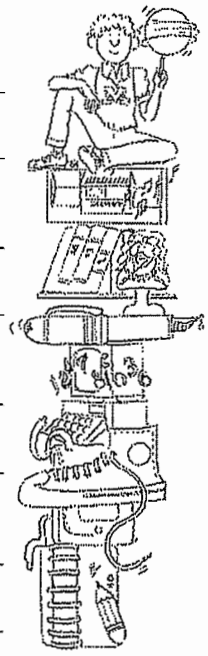
3. The answer is 0.75 or 3/4. What is the question? _____

_____

4. The answer is 0.5 or 1/2. What is the question? _____

_____

B. A banana muffin recipe makes 16 muffins. Each muffin costs $0.25.
Write a word problem that would give each of the following answers.



1. The answer is 32. What is the question? _____

_____

2. The answer is $2.25. What is the question? _____

_____

3. The answer is 0.25 or 1/4. What is the question? _____

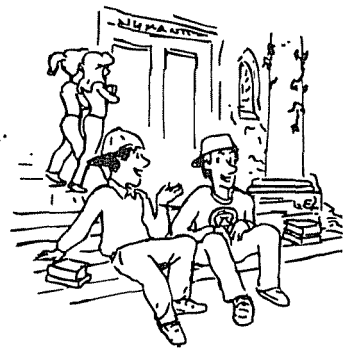
_____

4. The answer is 0.5 or 1/2. What is the question? _____

_____

SUPER-ELEVE LES QUESTIONS ET LES REPONSES

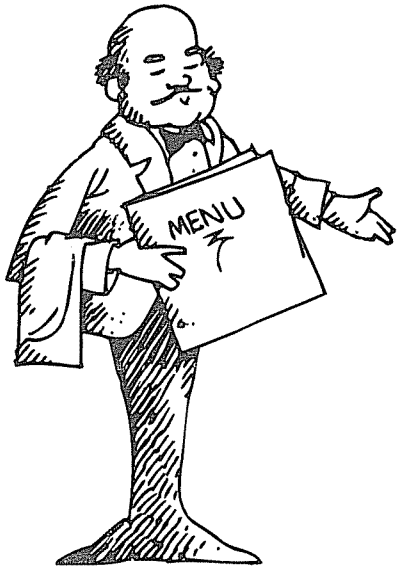
1. Comment t'appelles tu?	Je m'appelle _____.
2. Quel âge as-tu?	J'ai _____ ans.
3. Quelle est ta couleur préféré ?	Ma couleur préférée est _____.
4. Combien de frères as-tu?	J'ai _____ frères.
5. Combien de soeurs as-tu?	J'ai _____ soeurs.
6. Quel est ton animal préféré ?	Mon animal préféré est le/la _____.
7. Qu'est-ce que c'est?	C'est _____.
8. Quelle est ta matière préféré ?	Mon animal préféré est le/la _____.
9. Quel est ton sport préféré ?	Mon sport préféré est _____ .
10. Quel est ton groupe préféré de musiciens/musiciennes?	Mon groupe préféré de musiciens/musiciennes est _____.
11. Quel est ton chiffre chanceux?	Mon chiffre chanceux est _____.
12. Qu'est-ce que tu fais samedi?	Samedi, je vais _____.
13. Qui est ton acteur préféré ?	Mon acteur préféré est _____.
14. Quel est ton film préféré ?	Mon film préféré est _____.
15. Quelle est ta bande desinée préférée?	Ma bande desinée préférée est _____.
16. Quel est ton émission préféré ?	Mon émission préféré est _____.
17. Qui est ton auteur préféré ?	Mon auteur préféré est _____.
18. Quel est ton livre préféré ?	Mon livre préféré est _____.
19. Quand est ton anniversaire?	Mon anniversaire est le _____.



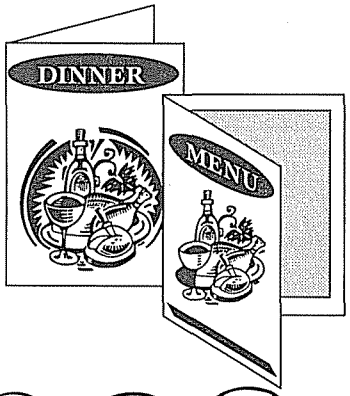
Problems for Dinner Theme - An Assignment

1. You have invited Robert, Shelley, Lui and Grace to the dinner. You need to find a Saturday Night that they are all free to come. Each has a busy work schedule. Shelley works every third night, Grace every fifth night, Robert every sixth night and Lui every second night.

   Use the following chart (extend it to a second month if necessary) in order to find a Saturday that everyone is free to come.



Mon	Tues	Wed	Thurs	Fri	Sat	Sun
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



2. You are responsible for arranging tables for a banquet of famous Canadians. Each rectangular table is
   1. 5 m wide and 2. 5m long. Each guest should have 1 metre of space along a length or width of the table. You may seat guests on both sides of a table, but not at the ends. The tables can be placed end to end.

   How many tables do you need if you have: a) 34 guests b) 50 guests
   c) 78 guests d) 100 guests

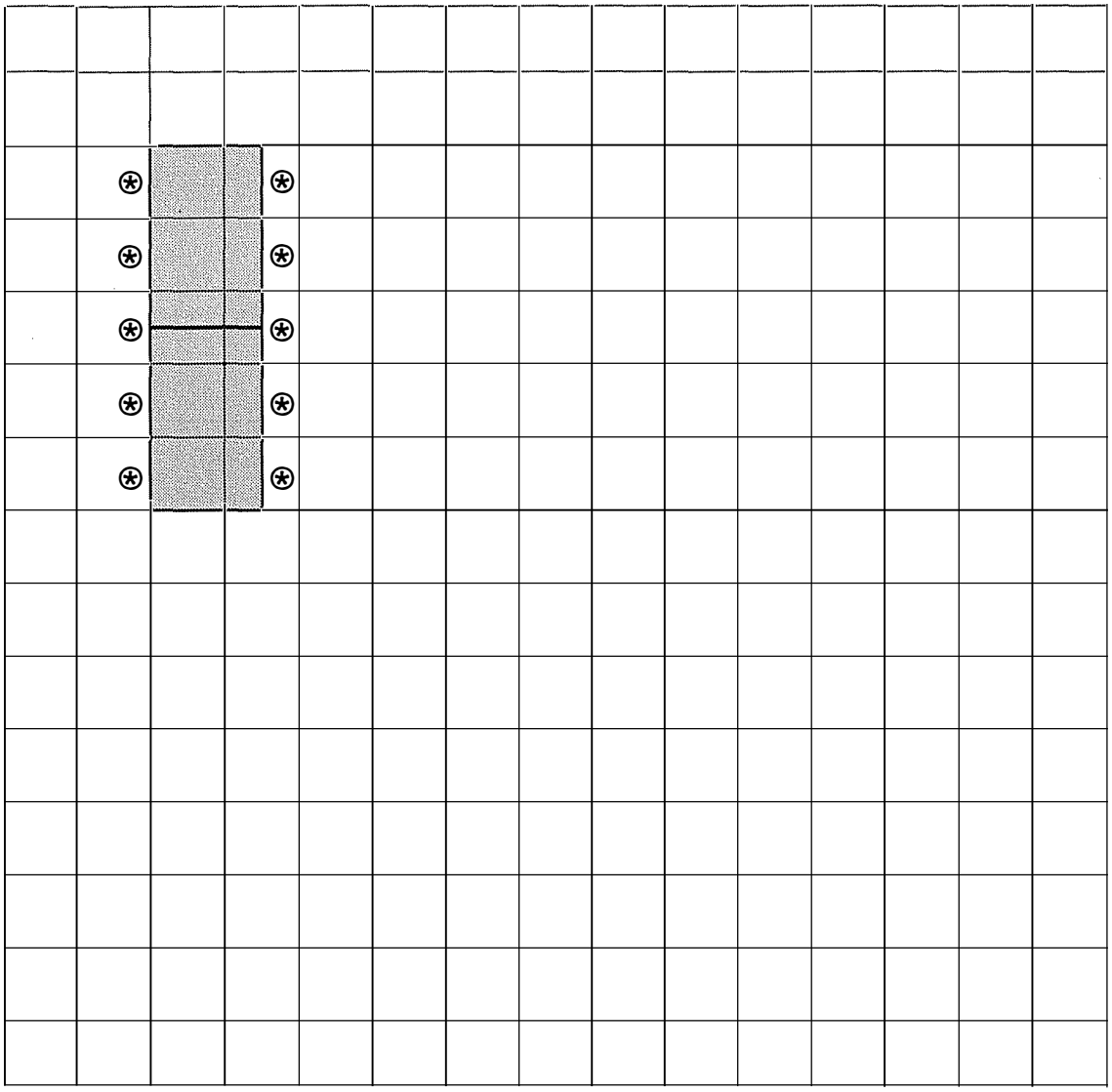
Draw a diagram of the table arrangement for each number on grid paper. Imagine that 1 block on the grid paper is 1 m. Group the tables so that each group can seat the same number of guests.

Indicate with an ⊛ where each guest would sit. The hall will accommodate up to six tables end to end in either direction.

(See page 8 for sample grid shows seating for 10 guests)



Problems for Dinner Theme - sample grid shows seating for 10 guests



Mice Measurement

