January, 2012 is

Kivalliq Math Month

CALCULATED FUN!

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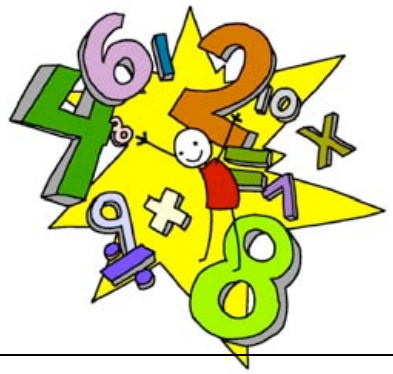
Ideas and Resources that add up to a Month of Calculated Fun!

Kivalliq School Operations & Kivalliq Science Educators' Community
2012

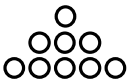
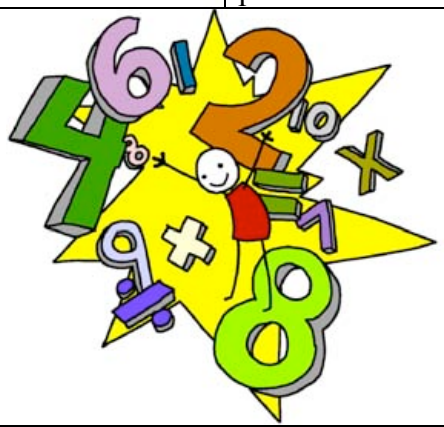
Kindergarten--Grade 2 Numeracy Calendar

Monday	Tuesday	Wednesday	Thursday	Friday
9 How Many Eyes Does Your House Have? Count how many eyes there are in your home. Write this number down on a piece of paper. How many people does this represent? Draw a picture of each person's face to show their eyes. Bring your picture to school the next day and show your teacher.	**10 I Spy A Number** Play a game of "I Spy" with your mom and dad during suppertime. Describe everything that you spy with a number. For example: I spy two ears, or I spy 3 pillows.	**11 What is your Name Number?** Print your name on a piece of paper. Count the number of letters in your name. Write this number down below your name.	**12 Circle Pictures** Make a picture using only circles. Big circles, small circles, and coloured circles. Bring your picture to school to show your teacher and classmates.	**13 1-2-3 Lemonade** Add the following ingredients together in a glass. -1 cup of cold water -2 spoons of sugar -3 spoons of lemon juice Stir all the ingredients until the sugar has dissolved and drink it up .
16 Triangle Pictures Make a picture using only triangles. Big triangles, small triangles and coloured triangles. Bring your picture to school to show your teacher and classmates.	**17 Ad It Up On Television** Watch television with your family this evening. Have a pencil and a piece of paper ready. Each time an advertisment comes on, make a mark on your paper. Bring the paper to school. Can you count all the marks?	**18 Hickory, Dickory Dock Its Time to Draw a Clock** Draw a picture of a clock or watch in your home. Include all of the numbers that you see on the clock. Which numbers are the hands pointing at?	**19 Number Face** Using only numbers, try to draw a picture of a funny face. Bring your picture to school for a display.	**20 Snack Attack** A 1-2-3 Snack is something that is good to eat that has three ingredients in the proportions of 1:2:3. Here is an example: -One banana, -Two pieces of bread -Three spoons of peanut butter. Make-up your own 1-2-3 Snack and share it with your family. Don't forget to tell your friends how to make it.
23 Number Rhymes Using the numbers from one to ten, make up words to rhyme with them. One--Fun Two--Shoes Three-Fleas Four--Doors etc. Draw a picture of your favourite rhyme and bring it to school.	**24 Penny Pictures** Find 6 pennies and arrange them into a nice pattern or design. Place a piece of paper over top of your design and rub it with a pencil. Bring your rubbing to school to show your teacher and class mates	**25 House of Legs.** You have two legs, a chair has four legs. How many legs are their in your house? Count them all, writed down the number and bring it to school to see which student has the most legs in their home.	**26 Telephone Numbers** Tonight, ask you mom or dad what your phone number is. Write it down and bring it to school. Exchange phone numbers with your friends.	**27** Number Cookies Your teacher will give you a recipe for delicious number cookies. With help from your mom or dad, mix up the recipe and cut the cookies into the shape of your favourite numbers. Bake them, ice them and eat them, but save one to take to school on Monday to show your teacher and friends.
30 Windows Count All homes have windows, but whose home has the most? Go home tonight and count all the windows in your house. Write this number down and bring it to school tomorrow.				

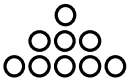
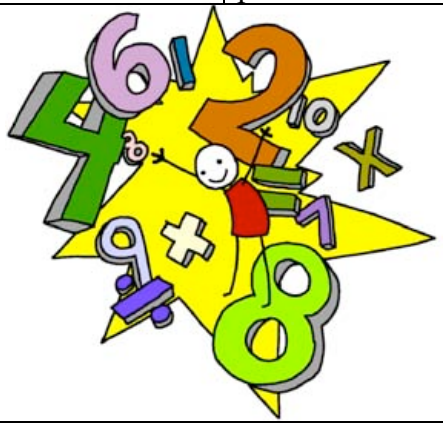
Grade 3-4 Numeracy Calendar

Monday	Tuesday	Wednesday	Thursday	Friday
9 **Math Measure** Measure the length of your table using a fork, spoon or ruler.	10 **Tele-Math** Pick 3 phone numbers for different family or friends. Find the sum of the digits in each phone number.	11 **Math Art** Draw a picture using only circles.	12 **Money Madness** How many different ways can you make 15¢?	13 **House of Legs** You have two legs, a table has 4 legs. How many legs are there in your house?
16 **Alpha Math** Give each letter of the alphabet a number. A=1, B=2,C=3… What is the sum the letters in your name?	17 **Math Art** Draw a picture of a face using only numbers.	18 **Money Madness** How many different ways can you make 25¢?	19 **Ad it up TV** Watch TV with your family. Count how many advertisements you see. Write it down on a piece of paper and bring it to school.	20 **Math Art** Draw a picture using only triangles.
23 **Hundred Chart Pattern** Colour all the even numbers on your hundred chart. Ask your teacher for the chart	24 **Hundred Chart Pattern** Colour all the odd numbers on your hundred chart. Ask your teacher for the chart	25 **Hundred Chart Pattern** Skip count by 3 and colour every third numbers on your hundred chart.	26 **Hundred Chart Pattern** Skip count by 5 and colour every fifth numbers on your hundred chart.	27 **Hundred Chart Pattern** Colour all the even numbers that are greater than 11 and less than 38 on your hundred chart.
30 **Math Art** Draw a picture using only rectangles.	Extra **Eye Spy!** Play a game of Eye Spy Shapes with your mom or dad.	Fun **Time to Eat** When ever you eat today, record the time on a piece of paper.		

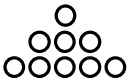
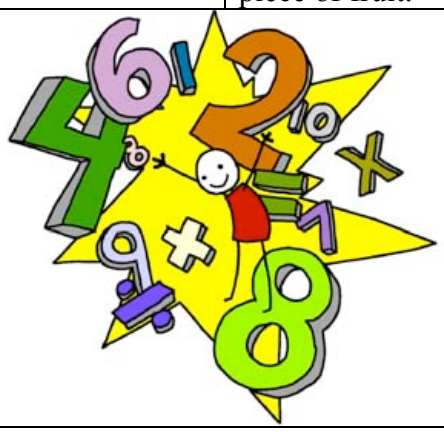
Grade 5-6 Numeracy Calendar

Monday	Tuesday	Wednesday	Thursday	Friday
9 **PickPuzzle** Use toothpicks to make this shape. Remove as few sticks as possible to leave only two squares. 	10 **RiddleTime** What occurs once in every minute, twice in every moment, and never in a thousand years?	11 **Can Count** Count all of the cans of food in your house.	12 **Weather Report** Listen to the radio, watch the news or check the internet. What was the temperature today in your community?	13 **Good Eats** Use Nunavut's Food Guide to make a healthy snack. Which groups did you eat? How many servings?
16  **Coin Puzzle** Move the coins by dragging them. Change the triangle into a square by moving the fewest number of the coins.	17 **Riddle?** Paula's mother had three children. The first child was named April. The second child was named May. What was the third child's name?	18 **Code Breaker!** Add up the numbers on a bar code from any product in you cupboard. Now Multiply them!	19 **TV Tally!** Check to see how long the commercials are during a 30 minute TV show. What is the total time of the commercials?	20 **Snack Attack!** Make a snack using only even numbers of items.
23 **Wild TTT** Play tic-tac-toe, except that at each turn the player can choose to play an X or an O. You win if you get three X's in a row, or three O's in a row.	24 **Riddle?** How many 9's are between 1 and 100?	25 **Can Can!** Find a can of food and read the nutrition label. Find the number of calories per serving and multiply it by the servings in the can.	26 **TV Tally!** Watch TV with someone and note how many times they change the channel in I hour.	27 **Snack Attack!** Cut some fruit into small pieces and play *Multiplication Snap* with your mom. Every time you win eat a piece of fruit.
30  Use tooth picks to make the shape above. *Move* three sticks and make two non-overlapping quadrilaterals that are exactly the same.	Extra How could you give someone $63 using six bills and/or coins, without using looneys?	Fun **Celebration** Have a Math Party. Make some Equation Cookies with your mom or dad. <u>Ask your teacher for the recipe.</u>		

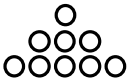
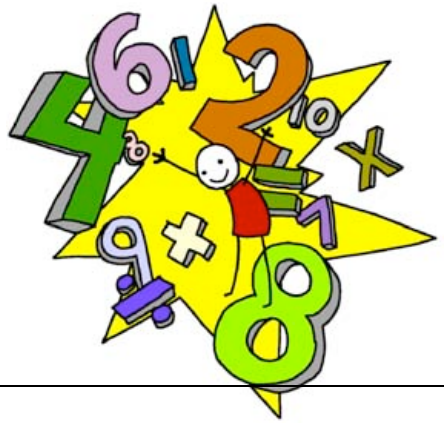
Grade 7-8 Numeracy Calendar

Monday	Tuesday	Wednesday	Thursday	Friday
9 **PickPuzzle** Use toothpicks to make this shape. Remove as few sticks as possible to leave only two squares. 	10 **RiddleTime** What occurs once in every minute, twice in every moment, and never in a thousand years?	11 **Can Count** Count all of the cans of food in your house.	12 **Weather Report** Listen to the radio, watch the news or check the internet. What was the temperature today in your community?	13 **Good Eats** Use Nunavut's Food Guide to make a healthy snack. Which groups did you eat? How many servings?
16  **Coin Puzzle** Move the coins by dragging them. Change the triangle into a square by moving the fewest number of the coins.	17 **Riddle?** Paula's mother had three children. The first child was named April. The second child was named May. What was the third child's name?	18 **Code Breaker!** Add up the numbers on a bar code from any product in you cupboard. Now Multiply them!	19 **TV Tally!** Check to see how long the commercials are during a 30 minute TV show. What is the total time of the commercials?	20 **Snack Attack!** Make a snack using only even numbers of items.
23 **Wild TTT** Play tic-tac-toe, except that at each turn the player can choose to play an X or an O. You win if you get three X's in a row, or three O's in a row.	24 **Riddle?** How many 9's are between 1 and 100?	25 **Can Can!** Find a can of food and read the nutrition label. Find the number of calories per serving and multiply it by the servings in the can.	26 **TV Tally!** Watch TV with someone and note how many times they change the channel in I hour.	27 **Snack Attack!** Cut some fruit into small pieces and play *Multiplication Snap* with your mom. Every time you win eat a piece of fruit.
30  Use tooth picks to make the shape above. *Move* three sticks and make two non-overlapping quadrilaterals that are exactly the same.	Extra How could you give someone $63 using six bills and/or coins, without using looneys?	Fun **Celebration** Have a Math Party. Make some Equation Cookies with your mom or dad. <u>Ask your teacher for the recipe.</u>		

Grade 9 Numeracy Calendar

Monday	Tuesday	Wednesday	Thursday	Friday
9 **PickPuzzle** Use toothpicks to make this shape. Remove as few sticks as possible to leave only two squares. 	10 **RiddleTime** What occurs once in every minute, twice in every moment, and never in a thousand years?	11 **Hockey Night** 6 teams are in a hockey tourney. If each team plays each of the others only once, how many games are played?	12 **Pizza Puzzle** A pizza recipe uses 4 cups of sauce for every 7 cups of flour. How many cups of flour are needed for 12 cups of sauce?	13 **Hole #s** It takes I hour to dig a hole 3 m long, 3 m wide, and 3 m deep. How long will it take to dig a hole 6 m long, 6 m wide, and 6 m deep?
16  **Coin Puzzle** Move the coins by dragging them. Change the triangle into a square by moving the fewest number of the coins.	17 **Riddle?** Paula's mother had three children. The first child was named April. The second child was named May. What was the third child's name?	18 **A $20 Question** A Canadian $20 dollar bill has a width of 70 mm and a perimeter of 442 mm. What is the length of the $20 dollar bill?	19 **TV Tally!** Check to see how long the commercials are during a 30 minute TV show. What is the total time of the commercials?	20 **Snack Attack!** Make a snack using only even numbers of items.
23 **No Kidding** All of my kids are girls except 2, all are twins except 2 and all are 10 years old except 2. What is the fewest number of kids that I could have?	24 **Riddle?** How many 9's are between 1 and 100?	25 **Can Can!** Find a can of food and read the nutrition label. Find the number of calories per serving and multiply it by the servings in the can.	26 **TV Tally!** Watch TV with someone and note how many times they change the channel in I hour.	27 **Snack Attack!** Cut some fruit into small pieces and play *Multiplication Snap* with your mom. Every time you win eat a piece of fruit.
30  Use tooth picks to make the shape above. *Move* three sticks and make two non-overlapping quadrilaterals that are exactly the same.	Extra How could you give someone $63 using six bills and/or coins, without using looneys?	Fun		

Grade 10-12 Numeracy Calendar

Monday	Tuesday	Wednesday	Thursday	Friday
9 **PickPuzzle** Use toothpicks to make this shape. Remove as few sticks as possible to leave only two squares. 	10 **Lost Your Marbles!** In a bag of marbles, 1/3 are red, 1/5 are blue, and 75 are black. How many marbles are in the bag?	11 **Hockey Night** 6 teams are in a hockey tourney. If each team plays each of the others only once, how many games are played?	12 **Product Power** What is the greatest possible product of two positive whole numbers whose sum is 96?	13 **Even Sum** A set of five even integers adds up to 580. What is the largest integer in this set?
16  **Coin Puzzle** Move the coins by dragging them. Change the triangle into a square by moving the fewest number of the coins.	17 **Riddle?** Paula's mother had three children. The first child was named April. The second child was named May. What was the third child's name?	18 **A $20 Question** A Canadian $20 dollar bill has a width of 70 mm and a perimeter of 442 mm. What is the length of the $20 dollar bill?	19 **Nonsense** If 2 orks = 9 pips, and ½ ork=2 pips + 1 zat, how many pips des 1 zat equal?	20 **Popcorny!** The cost of a bag of popcorn is $2 plus ½ its cost. How much does a bag of popcorn cost?.
23 **No Kidding** All of my kids are girls except 2, all are twins except 2 and all are 10 years old except 2. What is the fewest number of kids that I could have?	24 **Sale Price** John paid $15.54, including 5% GST, for a cap that was on sale at 20% off. What was the original price of the cap? (before tax & sale)	25 **FrAction!** One-third is one-twelfth of it. What is it?	26 **FrAction II** One-third is one-twelfth of twice of it. What is it?	27 **Next?** What is the next three numbers in each sequence below: 1, 2, 4, 6, 10, 12,... 1, 0, 2, 1, 3, 2, 4, 3, 5,…
30  Use tooth picks to make the shape above. *Move* three sticks and make two non-overlapping quadrilaterals that are exactly the same.	**Let's Eat!** If you have 4 kinds of bread, 5 kinds of meat, and 3 kinds of cheese. How many different sandwiches can you make if a sandwich consists of: 1 slice of bread and 1 slice of either cheese or meat, or 1 slice of cheese and 1 slice of meat.			

Family Math Night/Open House

School "Open Houses" are not a new idea for the Kivalliq Region. "Just Me and My Mom/Dad" nights, Math and Munchies, and School Science Fairs have all been successful in different schools throughout the region. Why not consider planning a Family Math Night for your school during Kivalliq Math Month. KSEC will provide $100 to registered schools to help purchase treats.

A Family Math Night does not have to be very complicated. If each class plans one or two Math Centres, you will have more than enough activities to fill up an evening of "calculated" fun! KSEC provides the schools with T-shirt which when combined with photocopied/laminated games and puzzles could make for great give-aways and prizes. Ideas for centres can be found in the Math Month Documents on First Class.

Teacher Conferences→Kivalliq Math Forum→Math Month

Ideas may also be found on the following websites:

Tangram Activities
http://www.tangrams.ca/
A large collection of activities and information.

http://mathforum.org/trscavo/tangrams/activities.html
Activities and answers!

http://www.ac.wwu.edu/~mnaylor/tangrams/tangramactivities.html
Activities for all grades.

http://www.kidscom.com/games/tangram/tangram.html
A tangram game.

http://www.leon.k12.fl.us/Public/SabalPalm/tchrpages/grade4/tangram.htm
A tangram webquest!

http://www.eduplace.com/tview/pages/g/Grandfather_Tang_s_Story_Ann_Tompert.html
Grandfather Tang lesson.

http://members.aol.com/sth777/page00.html
The Tangram page.

Counting and Number Practice
http://www.janbrett.com/numbers/numbers_flash_cards_main.htm
Number cards.

http://www.janbrett.com/games/addition_flash_cards_main.htm
A wonderful collection of flash cards created with Jan Brett's art work.

http://www.janbrett.com/activities_pages.htm
Almost 2,000 activities form Jan Brett's collection.

http://web.dps.k12.va.us/ParkAve/soltest.htm
Check out the various quizzes.

Math Games and Activities
Collections of games
http://www.funbrain.com/kidscenter.html
Funbrain games.

http://teacher.scholastic.com/maven/index.htm
Math Maven's Games.

http://mathforum.org/pow/
Problem of the week.

http://www.mathplayground.com/index.html
A new discover, fun for all ages.

http://www.learningwave.com/abmath/
An interactive mathematics simulation game.

http://www.edu4kids.com/
Drill games.

http://www.aplusmath.com/games/index.html
A+ Math games.

http://www.eduplace.com/math/brain/
Weekly brain teasers.

http://www.techteachers.com/gamesquizzes.htm
More games...

http://www.aaamath.com/B/add.htm
Good content, lots of different topics.

http://www.primarygames.com/curriculum/math.htm
Primary math games.

http://www.bbc.co.uk/education/mathsfile/gameswheel.html
Great games for the whole family.

Interactive Games and Tutorials
Basic counting and matching games
http://www.funbrain.com/count/index.html
Bunny count for young children.

http://www.gp.k12.mi.us/ci/community/thinkgame.htm
Higher level thinking games.

Practicing Math facts
http://www.funbrain.com/math/index.html
Math Baseball

Patterning
http://www.funbrain.com/cracker/index.html
Crack the code, some are challenging!

Number and Operations
http://www.funbrain.com/fractop/index.html
Soccer Shoot-out adding, subtracting and multiplying whole numbers.

http://www.funbrain.com/tictactoe/index.html
Win at Tic Tac Toe by solving math problems.

http://www.funbrain.com/linejump/index.html
Line Jumper will help you with your math facts.

http://www.funbrain.com/guess/index.html
Number sense with Guess the Number.

http://www.funbrain.com/numwords/index.html
Place value practice by writing the number on checks.

http://www.funbrain.com/osa/index.html
Practice those facts as you race the car.

http://www.funbrain.com/ofm/index.html
Arrange numbers from highest to lowest.

http://www.funbrain.com/tens/index.html
Place value practice.

http://www.funbrain.com/algebra/index.html
Order of operations practice.

http://www.funbrain.com/football/index.html
Practice your decimals.

http://funbrain.com/co/index.html
Challenge your graph skills.

http://funbrain.com/penguin/index.html
Calculate a percentage for your penguin waiter.

http://www.primarygames.com/flashcards/twomin.htm
Flashcard drills timed.

Time
http://www.primarygames.com/time/start.htm
Practice telling time.

Geometry
http://www.funbrain.com/poly/index.html
Practice your identification of geometric shapes.

http://www.primarygames.com/puzzles/match_up/shape_match/start.htm
Practice your shapes by playing a memory game.

Measurement
http://funbrain.com/measure/index.html
Test your measurement skills.

Fractions
http://www.funbrain.com/fractop/index.html
Soccer Shoot-out adding, subtracting and multiplying fractions.

http://www.funbrain.com/fract/index.html
Practice your fractions.

http://www.primarygames.com/fractions/start.htm
Pizza Party.

Additional Resources
http://illuminations.nctm.org/swr/list.asp?Ref=1&Std=4&Grd=-1
data analysis and probability games.

http://www.mathsyear2000.org/
A huge collection of very nice games.

http://teams.lacoe.edu/documentation/classrooms/linda/algebra/activities/balance/balance.html
Basic algebra game for young students.

Math Fair Guidelines
(www.mathfair.com)

A math fair is what you make it—you decide! Here are some guidelines for one possibility, a SNAP math fair (www.mathfair.com)

The SNAP math fair is based on four main tenets:

Student-centered
In a SNAP math fair, the students are front and center. They are involved in the presentation. Their displays present problems, not solutions. Passers-by try the problems, and the students help them solve the problems. As well as standing for "Student-centered", the S in SNAP stands for "Super-interactive".

Non-competitive
No first prize! No arguments about judging. No negative feelings by students who do not win a prize. No prizes are awarded at a SNAP math fair. No prizes are needed.

All-inclusive
The participation rate should be 100%, whether its for a single class, a single division or for an entire school.

Problem-based
Students present problems (not the solutions) to the spectators. They will help the spectators solve the problems. Of course, the students must first solve the problems themselves and prepare tabletop displays. At a SNAP math fair, the students are focused on the process rather than the result. It gives them a broader understanding of the meaning of mathematics. This is the underlying vision that makes the SNAP program so unique and so effective.

Organizational Guidelines

Teachers distribute the problems
How to do this is the teacher's call. You can use anything from cookie jar approach to assigning special problems to specific students, although either extreme is probably not optimal. Teachers have accomplished this in different ways (see the getting started pages).

Students work in small groups
Doing math should not be an isolated activity. Different students bring different skills to the group. Future leaders have to learn about co-operation.

Allow sufficient time
A good problem takes time to solve. An attractive tabletop display is more than a few minutes work. If students work on the fair as part of their daily schedule, a week is a minimum.

MATH CAMP

Whale Cove Template

WHAT IS IT?
A sleepover for grade 5 and/or 6 students.

Time:
Friday at 6:00pm until Saturday between 11:30 and 12:00pm

Purpose:
Engage Students in math activities, challenges, and cooking.

Who can help?:
The camp should be run by teachers and, if possible, with the help of some parents. Also consider using High School Students as camp assistants. With some preplanning, they may be able to apply this experience towards the Aulajaaqtut Project.

Sample Schedule:
Before camp begins, shopping for supplies is a great numeracy activity suitable for student assistance

FRIDAY
6:00pm Arrival, welcome, rules and math camp teams.
6:30pm Team challenge: Amazing Race: Students solve clues to find chickens hidden in lockers.
7:00pm Pizza Cook-off. Students use a math recipe to make pizza and the best tasting pizza wins points. You can add many different contests such as; best tasting, most creative, best looking. Award points as you like.
7:30pm (while the pizza's are cooking) Archery Challenge: students throw bean bags or rubber chickens into hula-hoops or archery targets, each hula hoop is worth a different amount of points. Each team needs to add up their score.
8:00pm Eat pizzas, judge the winning pizzas.
8:30pm Smartie Pants: see attached sheet.
(one person hides the numbers while they are doing Smartie Pants)
9:00pm Number Scavenger Hunt (need a flashlight) Students search the school for numbers hidden throughout the school, in the dark using only a flashlight. After the numbers have been found the teams add up their scores.
9:30pm Problem Solving Challenge (see KMEP Puzzles and Riddles)
10:00pm Computer Lab: Keyskills or calculator
10:30pm Movie and popcorn, in gym get ready for bed.
12:00am Lights Out

SATURDAY
8:30-9:00 Wake-up and pack-up
9:00am Geometric Pancake Challenge (Thicker batter makes better shapes)
10:00am 2Ball Challenge in gym : see attached sheet
11:00am Clean-up/Certificates/Prizes to winning team

MATH CAMP

Whale Cove Template
(Edit and adapt for your school needs)

Grade 5 and 6 students, you are invited to a MATH CAMP, on FRIDAY, JANUARY13TH at 7:00pm until 12:00pm on SATURDAY, JANUARY14TH. We will be playing tons of fun math games, have math challenges, and be doing some creative cooking.

If you would like to join us at this fun event please fill out the form at the bottom, and return it to Rebecca or Kristen. If you have any questions call us at 9300.

DETAILS:
What? Sleepover
When? FRIDAY, JANUARY13TH to SATURDAY, JANUARY14TH.
Who? Grade 5 and 6 students
Where? At the school

What to bring?

- ✓ Sleeping bag
- ✓ Mat
- ✓ Pillow
- ✓ Pajamas
- ✓ Indoor shoes
- ✓ Change of clothes
- ✓ Toothbrush

Return this half to the school.

I give permission for _____(child's name) to attend the math sleepover at the school.

Signed: _____

Any information we need to know about your child: (medication, etc…)

_____

Smartie Pants

(adapted from Math Inservice Activities in the Saskatchewan Facilitators Manual of Middle Years Math Inservice, Regina, 1996)

A Dessert Activity for Math Camp

Part 1

Do not open the box of Smarties until you are instructed to do so. Using a ruler, make the following measurements in centimeters.

1. What is the length of the box? _____

2. What is the width of the box? _____

3. What is the depth of the box? _____

4. What is the expression used to calculate area? _____

5. What is the area of the biggest side? _____

6. What is the surface area of the box? _____

7. What is the expression used to calculate volume? _____

8. What is the volume of the box? _____

9. What is the mass of the box of Smarties in grams? _____

10. The container has how many sides (faces)? _____

how many edges? _____

how many vertices(corners)? _____

Part 2

Open the box of Smarties, but do not eat them yet!

1. What percentage of the box do the Smarties occupy? _____

2. How many Smarties are in the box? _____ _____
   estimate count

3. How many Smarties are the colour red? _____

   yellow? _____ pink? _____ green? _____ Purple?_____

4. Arrange smarties of the same colour it on rows to form a bar graph. Draw the bar graph in the space provided.

5. Express each number of coloured smarties as a fraction of the total.
   red _____ blue _____ yellow _____

   pink _____ green _____ purple_____

6. Estimate how many Smarties would it take to cover your desk?

   _____ _____
   estimate calculate

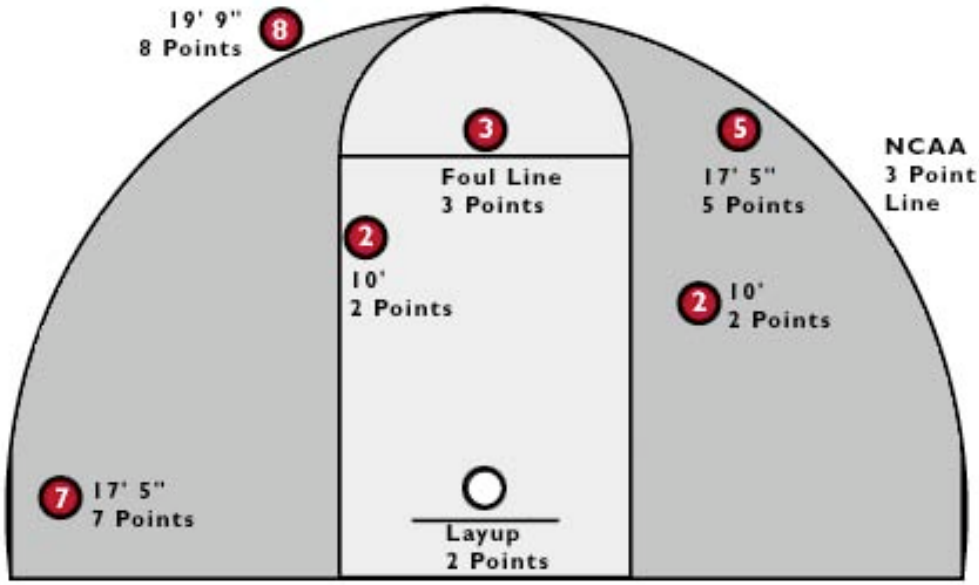
7. Why do think there are more Smarties of one colour?

8. Which smarties taste the best? _____

2 Ball

A Math Camp Activity

2ball is a game in which two-person teams shoot for 60 seconds from numbered spots on the floor. If a shot is made, the team receives points based on the value of the spot. Each team must add up their total as the game progresses. Spots may be constructed out of construction paper and arranged according to the diagram below. Loud music is often played during shooting portion of the game, to raise the excitement levels.



What Are the 2ball Rules?

1. Half-court play - one minute time period
2. Seven shooting spots
   - Six designated shooting spots, each with assigned point value
   - Layup is worth two (2) points and must be attempted from within a three foot radius of the basket
3. Players accumulate points by making official baskets from the designated shooting spots
4. One foot must begin on the shooting spot
5. One player cannot shoot consecutive shots. Teams must alternate shots.
6. A player cannot shoot consecutively from the same spot--any invalid shots will not be counted.
7. Players must pass or dribble between spots.
8. Bonus points are awarded for teams that attempt a shot and scoring from each of the seven shooting spots.
9. Team with the highest score wins.
10. A tiebreaker competition will be held if two teams have the same winning score.

Math Baseball

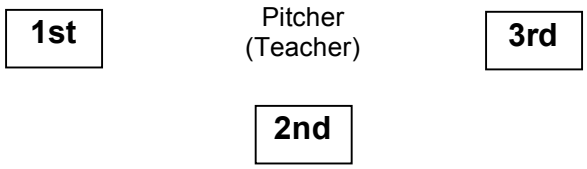
Another Fun Game for Math Camp

Materials: Dice, cards, and/or math flashcards
Desks (bases)
Paper/pencil

Number of players: two teams (of manageable size)

How to play:

Basic Game: Using a desk for home plate, line up two teams in the configuration shown below.



1. Roll a dice or use "rock--paper--scissors" to decide which team is at bat.
2. One player from each team, line up at home plate and face the teacher
3. The teacher holds up a math flash card (pitches a problem)
4. The two students compete to answer the question the fastest
5. If the player from the team "at bat" answers first correctly, then he/she rolls a dice on the home plate desk to determine the type of hit. The player from the other team goes to the end of his/her team line.

Dice Roll	Hit
1	single
2	double
3	triple
4	home run
5	roll again
6	foul ball (must take another pitch)

6. If the player from the team not "at bat" answers first correctly, then the batter is out and both players go to the end of his/her team line.
7. If both teams get the question wrong, the players move to the end of their respective lines and two more players take a new pitch.
8. Play continues until a team has three outs and then the other team gets to bat.

9. Runs are scored as teams answer questions correctly and their base runners move around the bases to home plate as in baseball

Variations:

1. Use dice or cards instead of math flashcards. Have players each roll a dice on the home plate desk (or flip a card) and add, subtract, or multiply (depending on the version you are playing). Note if playing cards are used, remove all face cards and any other cards that make the game too difficult.
2. Make value of a hit dependant on the type of question answered. That is, batters request an addition question for a single, subtraction for a double and multiplication for a triple. (Dice, cards, or flash cards work with this version).
3. Introduce the idea of a "walk". For example create some special flash cards that read "WALK" or define double sixes as a "WALK" or define the joker a the "WALK" card.
4. Adapt the rules to suit the camp. Students like the baseball analogy.

MATH MONTH SCHOOL CONTEST

Kindergarten to Grade 3

- **Draw a picture using only numbers. Have a contest in your school and invite community members to be judges.**

Grade 4 to 6

- **Make a Math Month Poster, using only numbers and text. Have a contest in your school and invite community members to be judges.**

Prizes: Use the t-shirts as prizes for the winning students.

Deadline:

Good luck to all students!!!

FLASHMASTER CHALLENGE

When? During Math Month

Where? At your school, in your class. Finals in the gym.

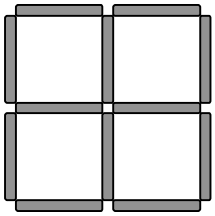
Who? All Grade 1-6 Students. Eliminations will be made in the classroom. Finals to include the top 10-15 students.

What? Flashmaster: Flashcard Challenge
Grades 1 & 2: Addition Challenge (30 Flashcards 9 sec/Card, Level 7)
Grades 3 & 4: Subtraction Challenge (30 Flashcards 9 sec/Card, Level 7)
Grades 5 & 6: Multiplication Challenge (30 Flashcards 9 sec/Card, Level 7)
Ties will be broken by: 1. Increasing the level of difficulty
2. Decreasing the time per flashcard

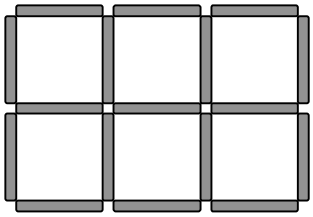
Stick Puzzles

Stick puzzles are great fun for young and old alike. Here are some popular ones that would be a great addition to a Math Fair, a Math Camp, or just a classroom center.

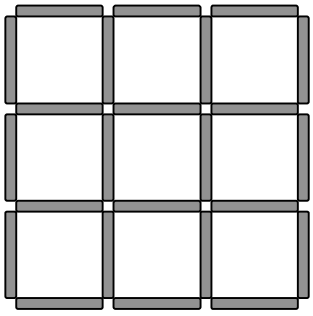
1. Remove four sticks so that only two small squares remain



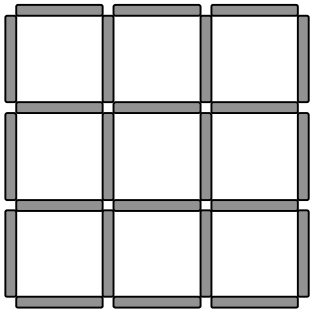
2. Remove four sticks so that only one large square and two small squares remain.



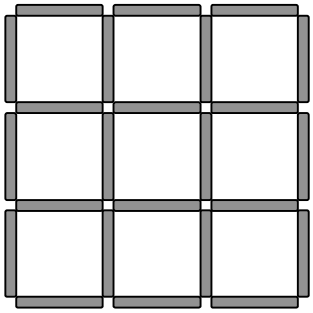
3. Remove four sticks so that only five small squares remain.



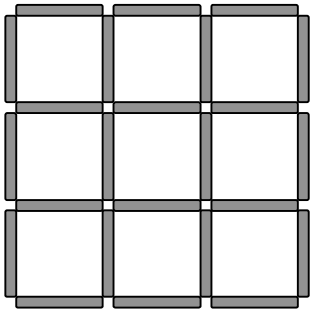
4. Remove four sticks so that only seven small squares remain.



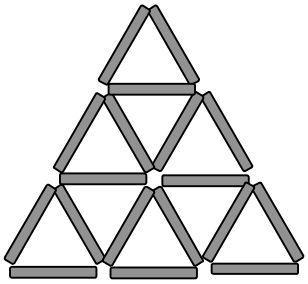
5. Remove four sticks so that only six small squares remain.



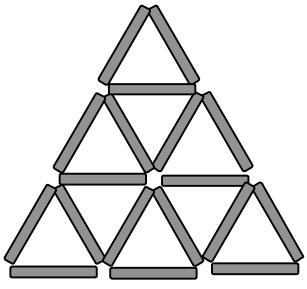
6. Remove eight sticks so that only four small squares remain.



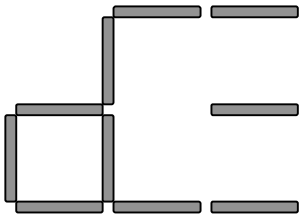
7. Remove six sticks so that only six small triangles remain.



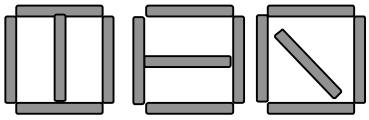
8. Remove three sticks so that only seven small triangles remain.



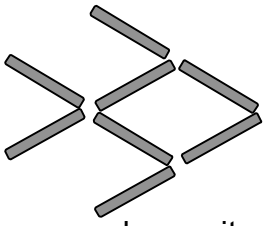
9. Move three sticks to leave only two squares.



10. Remove six sticks to leave ten.

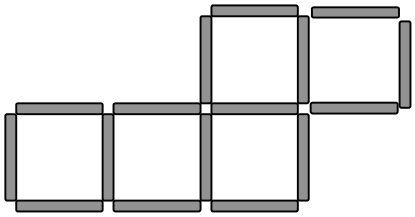


11. Move three sticks to make the fish face the opposite direction.

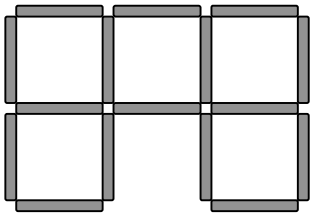


Can you change its direction by only moving two sticks?

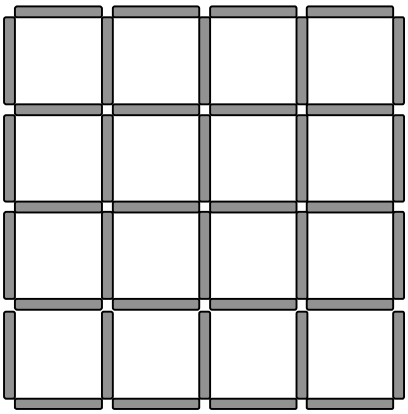
12. Move two stick so that only four squares remain.



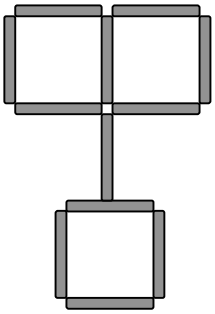
13. Move three sticks so that only four squares remain.



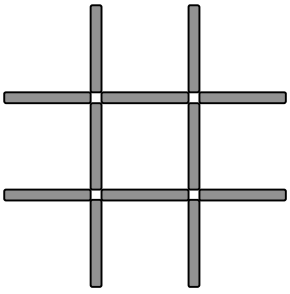
14. Remove nine sticks so that no squares remain.



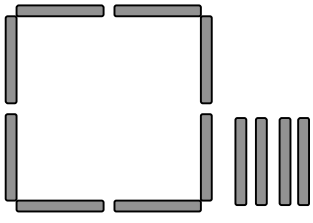
15. Remove six sticks so that five squares remain.



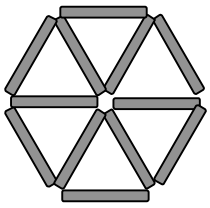
16. Move three sticks to get three perfect squares.



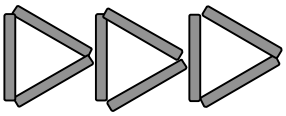
17. Use four sticks to divide the large square into two parts of the same shape.



18. Move 4 sticks to form 3 equilateral triangles



19. Move three sticks to form four equilateral triangles



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January is Math Month!

The Month of January is Math Month in the Kivalliq Region. Teachers and schools are encouraged to "pump up" their math programs during this time and try to engage students, and even families, in numeracy activities.

In the past, the three barriers that reduced or even prevented school participation in Numeracy Month Activities were:

1. Lack of ideas and/or resources for Math Month
2. Lack of funds to promote Math Month
3. Lack of time to plan and coordinate Math Month Activities.

KSEC recognizes these barriers and provides some supports to help reduce them and encourage the school-wide promotion of Numeracy for the month of January.

Math Month Ideas
KSEC has compiled this compendium of Math Month Activities to support schools in numeracy engagement

$300 Numeracy Month Grant
The Kivalliq Science Educators Community have established Math Month grants for Kivalliq Schools interested in promoting math and engaging the school and community in numeracy activities. See the next page for application details.

First Class Conference
KSO has established a conference to support Math Month. The conference acts as an archive for shared resources as well as a forum for exchange of ideas. Check out the conference by following these instructions:

Teacher Conferences → Kivalliq Math Forum → Math Month

In this conference you may download the following documents and resources:

- Math for the Fun of It
- Classroom Puzzles
- KenKen Puzzle
- 100 Classroom Riddles
- Mathemagics
- Math Problem of the Day
- Math Games for Home and School

Math Month
School Grant Application

School:_____ Contact:_____

The Kivalliq Science Educators Community has established Numeracy Month grants for Kivalliq Schools interested in promoting math and engaging the school and community in numeracy activities.

Check off which funds you are applying for

❑	Math Fair/Open House (School-wide event open to community)	$ 100
❑	Camp (a sleep-over for Grade 5 and/or 6 students)	$ 100
❑	Weekly School Activities	$ 50
❑	School Community Contests	$ 50
	Total	$_____

By applying for these funds you agree to:

- ✓ Spend the amounts on the Numeracy Month activities indicated,
- ✓ Complete a Numeracy Month Report and send it into KSO and
- ✓ Email 3-5 electronic pictures of Numeracy Month activities in your school.

_____ _____
School Math Facilitator Principal

Fax completed application to Jim Kreuger, Kivalliq School Operations (867-793-2996)

Math Month
Grant Report

School:_____ Contact:_____

This report substantiates your Math Month Grant and provides important data for funding proposals which underwrite this grant program. Email completed form to Jim Kreuger (j_kreuger@kivalliq.edu.nu.ca) at Kivalliq School Operations (Fax:867-793-2996). Also include 3-5 electronic photos of your Math Month activities.

Which math activities did your school do?

	Participation		
	Students	***Teachers***	***Community***
❑ Math Fair	_____	_____	_____
❑ Math Camp	_____	_____	_____
❑ Math and Munchies	_____	_____	_____
❑ Poster Contest	_____	_____	_____
❑ Flashmaster Challenge	_____	_____	_____
❑ Numeracy Calendars	_____	_____	_____
❑ _____	_____	_____	_____
❑ _____	_____	_____	_____
❑ _____	_____	_____	_____
❑ _____	_____	_____	_____
❑ _____	_____	_____	_____

Example
Math Month Schedule

Whale Cove Template: adapt to meet the needs of your school

Friday, January 6, 2012.

Team Challenge 9:00am in your classroom.

Add up the last four digits of your phone number. The person with the highest number will win 5 points for their team.

Example: 9300 9+3+0+0= 12

Hand the name of the person to Kristen by 10:00am. Winners will be announced at 10:20am.

Thursday, January 12 , 2012.

***Math and Munchies(Open House) at* 3:00pm**

The community will be invited to learn some math games and tricks. This event will be held in the gym. Each teacher will run a math station. Snacks will be served. Students and community members will wander around the gym and try the math activities.

Tuesday, January 17 , 2012.

Tallest Team Challenge 11:20am.

Measure your team and add up how tall your whole team put together is. Points will be awarded for first, second, and third. This will be a regional contest. The tallest school will win a trophy.

Friday, January 20, 2012.

Math Camp, 7:00pm

The grade 5 and 6 students will be invited to a math sleepover at the school. Math activities will be done. Students will go home on Saturday at 12:00pm. Any teachers wishing to help with this event can let Kristen or Rebecca know.

MATH FAIR

November 19-23

Math Fair Show on Friday, November 23, at 2:30pm.

Students will pick a math problem or puzzle, solve it, and display their solution and problem solving process on bristol board. Students can work individually, as a group or as a class. It would be great if K-12 participated in this event!

See attached sheet for resources, or talk to Kristen for ideas!

Thursday, January 25, 2012.

Loose Change, Change the World!

Students should bring in pennies to their class. The teacher can do various math activities with the money. The class with the most pennies will decide which charity to whom to make a donation. Money can be brought in all week. On December 1, the money will be counted and a cheque will be made for the charity.

Numeracy Calendars

Homework (Homeplay) that gets the whole family involved.

Send the attached Numeracy Calendars home with your students to get the family involved with Math Month. Parents can be asked to initial each day that they participate and students can bring the calendars back to school at the end of the month to compare.

Recipes for Math Month
Here are some recipes that you can make at school or send home for the families to try. Be sure to include a note that all cooking should have adult supervision.

1-2-3 Lemonade
Add the following ingredients together in a clean glass.

-1 cup of cold water
-2 spoons of sugar
-3 spoons of lemon juice

Stir all the ingredients until the sugar has dissolved and drink it up.

1-2-3 Snack Attack
A 1-2-3 Snack is something that is good to eat that has three ingredients in the proportions of 1:2:3. Here is an example:

-One banana,
-Two pieces of bread
-Three spoons of peanut butter. Make-up your own 1-2-3 Snack and share it with your family. Don't forget to tell your friends how to make it.

Math Pancakes
Mix ingredients together in a bowl or jug and beat until lumps are gone.

1 cup flour
2 tsp. baking powder
3 tbsp. sugar
2 tbsp. oil
Pinch of salt
1 egg

Add flour or milk to adjust the batter thickness. Thicker batter makes better shapes. Put a small amount of oil in a frying pan and heat to the medium setting. Pour or spoon the batter into the prepared frying pan. Try to make different geometric shapes. Makes 10 to 12 pancakes.

Math Cookies

This is a great recipe for children to help make because overworking and rerolling the dough doesn't harm the cookies and many math skill, including measurement, estimation and counting, are reinforced in the process. They taste pretty good too!

2-1/2 cups all-purpose flour	(625 mL)
2 tsp baking soda	(10 mL)
1 cup butter	(250 mL)
1-1/2 cups granulated sugar	(375 mL)
1 egg	
Optional (For a Spiced-Up version add)	
2 tsp each cinnamon, cloves and ginger	(10 mL)

• Stir together flour, baking soda, (cinnamon, cloves and ginger--optional). In large bowl, cream together butter, sugar and egg; gradually add dry ingredients, mixing well. (If dough is very soft, chill slightly for easier rolling.)

• On lightly floured surface, roll out dough to 1/8-inch (3 mm) thickness. With cookie cutters, cut into desired shapes. To make number shapes use a butter knife or popsickle stick to cut out the number in the dough. Place on greased baking sheet and bake at 375°F (190°C) for 5 to 8 minutes or until set. Makes about 50 cookies.