## Parent Helpful Hints

Volume 1, Issue 3

Math for the Fun of it

During summer vacations, on rainy days, while waiting at the doctor's office, or on a stroll through the neighbourhood learning never ends. Your children can explore some fascinating mathematical possibilities in the world around them every day. For instance, math can be found outdoors in nature: look for symmetry in leaves; count the number, sizes, and kinds of trees on your street; and look at the various shapes and patterns of blooming flowers. Children will be learning math and enjoying it too! The activities in this section can be done anytime and anywhere.

### Guess if You Can ....

What to do

1. Let your child think of a number between a stated range of numbers while you try to guess the number by asking questions. Here is a sample conversation.

Child: I am thinking of a number between 1 and 100. Parent: Is it more than 50? Child: No. Parent: Is it an even number? Child: No. Parent: Is it more than 20 but less than 40? Child: Yes. Parent: Can you reach it by starting at zero and counting by 3's? Child: Yes.

(At this stage, your child could be thinking of 21, 27, 33, or 39.)

2. Figure out the answers to your own questions.

3. After you have guessed your child's number, let your child guess a number from you by asking similar questions





Inside this Edition .... Parent Pointer



# Maths for the Fun of it .....

### What Are the Coins?

Grades 2-5

#### What you'll need

Some coins

#### What to do

Ask your child the following questions:

- 1. I have three coins in my pocket. They are worth 10 cents. What do I have?
- 2. I have three coins in my pocket. They are worth 25 cents. What do I have?
- 3. I have three coins in my pocket. They are worth 15 cents. What do I have?
- 4. I have three coins in my pockets. They are worth 30 cents. What do I have?
- 5. I have ? coins in my pocket. They are worth ? cents. What could I have?
- 6. This problem has more than one answer. It is challenging for children to experience problems like this.
- 7. I have coins in my pocket, which have a value of ? cents. How many coins could I have?

You get the idea! Give your child a few coins to figure out the answers.



## **Parent Pointer**

Use this activity to help your child develop an understanding of patterns and variables (the unknown) to solve a problem. This is

## **Money Match**

Grades K-2

### What you'll need

Dice to roll; 10 of each coin [ five cent, ten cent, twenty cent, fifty cent, one dollar]

### What to do

- 1. For young players (5 and 6 year olds) use only two different coins. Older children can use all types of coins.
- 2. Explain that the object of the game is to be the first player to earn a set amount.
- 3. The first player rolls the dice and gets the number of 5 cent pieces shown on the cube. Keep all like coins in batches or stacks of 5 or 10.
- 4. As each player accumulates enough of each coin they are to trade for the next coin...e.g. 2 five cents = 1 ten cent. Players take turns rolling the cube to collect additional coins.
- 5. The first player to reach the set amount wins.



### **Parent Pointer**

Counting money and batching in groups of 5's, or 10's teaches children matching skills and helps in the beginning stages of addition and multiplication. Children also learn how to identify coins and understand their values.



### Math for the Fun of it.....

### **More or Less**

Grades K-2

#### What you'll need

One coin, number cards, scratch paper, pen, and pencil

#### What to do

- Two players will play a card game where each will draw a card. The players will compare cards to see who wins that round. Before you begin, flip the coin and call "heads" or "tails" to see if the winner of each round will be the person with a greater value card (heads) or a smaller value card (tails).
- 2. To begin the game, divide the cards evenly between the two players.
- 3. Place the cards face down. Each player turns over one card at a time and compares: Is mine more or less? How many more? How many less? The player with the greater or smaller value card (depending on whether heads or tails was tossed) takes both cards.
- 4. The winner of the game is the player with more cards when all the cards are gone from the stack.
- 5. Now try the same activity with each player pulling two cards and adding them. Which sum is more? How much more? How much less?

## **Parent Pointer**

Playing with numeral cards helps children learn to compare quantities of numbers. Children can

Game and ideas continued on next page.....



## MATHS FOR THE FUN OF IT .....

### **Problem Solvers**

Grades 1-3

#### What you'll need

Enough sets of cards so that each player has a set of cards numbered 1 through 6.

#### What to do

- 1. Super sums. Each player writes numbers 1-12 on a piece of paper. The object of the game is to be the first one to cross off all the numbers on this list. Use only the cards 1-6. Each player picks two cards and adds up the numbers on them. The players can choose to mark off the numbers on the list by using the total value or crossing off two or three numbers that make that value. For example, if a player picks a 5 and a 6, the player can choose to cross out 11, or 5 and 6, or 7 and 4, or 8 and 3, or 9 and 2, or 10 and 1, or 1, 2, and 8. If a player cannot cross off a number, the player loses the turn. The first player to cross off all the numbers wins.
- 2. Make the sum of 100.Use only cards 1-6. Each player takes turns drawing a card and each player must take 6 cards from the deck. With each draw, a player decides whether to use the number on the card in the 10s place or the 1s place so that the numbers total as close to 100 as possible without going over. For example, suppose a player draws the following cards in this order: 1, 6, 3, 2, 3, 2, and chooses to use the numerals in the following way:



This card game helps children develop various ways to use numbers in different combinations and to see the many possibilities of arriving at the same sum by adding different sets of numbers.

### WORD PROBLEMS

Check out the weekly Problem Solving Challenge in the Newsletter....

As a family you can see who has the Maths Smarts in your house???

## **GREAT WEBSITES ....**



http://au.ixl.com/promo? gclid=CNSV9semkrkCFcEepAodDC4Aog&p hrase=display+math+terms+banners&par tner=google

http://www.math-play.com/math-jeopardy.html



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http://nrich.maths.org/8514

## MATHS FOR THE FUN OF IT ....

### Let's Play Store

Grades K-5

#### What you'll need

Empty containers (cartons or boxes), old magazines, books, newspapers, calculator, pencil or crayon, and paper

#### What to do

- 1. Help your child collect empty containers so that you can play as if you were shopping at the grocery store. Gather the items and put them on a table.
- 2. Help your child think of a price for each item. Mark the prices on the containers. You can even mark some items on sale.
- 3. Pretend to be the customer while your child is the cashier.
- 4. Teach your child the difference between the math symbols (+, -, ÷, x, and =) and how they are used when using the calculator. Help your child add the prices of each item on the calculator and total the amount using the (=) symbol. Have your child write the total on a piece of paper, which will be your receipt.
- 5. While you and your child play store, you can ask questions like how much would it cost to buy three cartons of eggs? How much does 1 box of soap cost, if they are 2 for \$5.00? How much is my bill, if I don't buy the cereal? How much more will it cost if I buy this magazine? Have your child estimate the amounts of the items you are buying. Check to see if the estimation is correct on the calculator.



### **Parent Pointer**

Learning to use the calculator will help your child understand and apply estimation and reasoning skills, as well as learn addition,





## MORE MATH WEBSITES.....



Kids Math Games 5

http://www.coolmath4kids.com/0-arithmetic-help-lessons-practice.html

http://www.freemathhelp.com/



http://www.kidsmathgamesonline.com/



Maths is everywhere.... In the real world and we don't even know we are doing it.

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See if you can solve this Handshake Problem.

How many hands do you shake in a day? Week? Month? Year?

## Handshakes

Three friends (Joey, Philamon and Matthew) meet in town. They each shake hands with each other.



How many handshakes are made? How many handshakes will be made between 4 friends, or 5 friends?

What if 10 friends meet. How many handshakes? Have you identified a pattern to help solve this problem?