

## Sharing Our School Focus with Parents

February 15th 2016.



### Maths Problem Solving: Matty's Maths Mysteries

Problem Solving in Maths is one of the areas identified in our School Improvement Plan to further develop in 2016. This week we continue our school focus on Maths Problem Solving.

When you and your child are trying to solve a problem, have your child share his or her thinking aloud and talk about the strategies that he or she used to reach a solution. If some of your child's ideas are puzzling, ask your child to explain further. As children talk about their ideas and how they reach solutions, they are learning to reason mathematically.

Suggest that your child act out a problem or draw a diagram to solve it. Have your child show how he or she reached a conclusion by drawing pictures and moving objects as well as by using words.

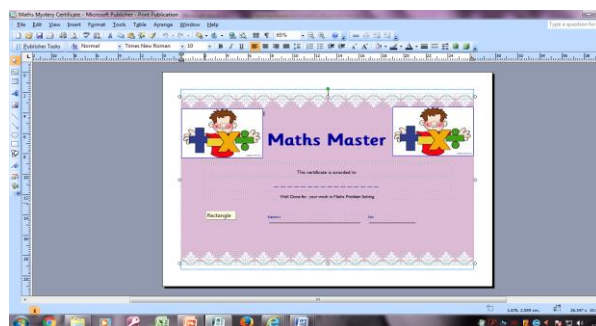
Treat errors and misconceptions as opportunities to develop reasoning skills and new ideas. Identify which part of your child's reasoning is convincing and which part is less convincing. For example, "I like the way you organised the information. Can we look at the chart again to see if the numbers are accurate?" Also, prompt your child to think of another way to solve the problem.

### Holy Trinity NS Maths Problem Solving Strategy

- R** Read
- A** Attend to key words
- V** Visualise
- E** Estimate
- C** Choose numbers
- C** Calculate
- C** Check



Try some of the  
following problems!



*Matty's Maths Masters Awards are  
presented each week at Assembly.*

## 1st

Elise started her maths homework at half past five. It took her thirty minutes to complete all the problems. What time was it when Elise finished her maths homework?

Vince just used his allowance to buy some toy cars. He paid €1, and now he has €3 left. How much money did Vince have before buying the toy cars? Write an addition number sentence that fits the story.

Carter had a total of €19 in his piggy bank. Then, he spent €9 at his favourite clothing store. How much money is in his piggy bank now?

## 2nd

I am a two digit number. The sum of my digits equals five. I am an odd number. I am the greatest number that meets this description. What am I?

Kurt wants to paint his house blue. He needs 76 litres of blue paint and already has 8 litres. How many more litres of blue paint does he need?

Last week, an active sea otter ate 11 kilograms of food. Its lazy otter friend ate 2 kilograms. How many kilograms did the two otters eat?

## 3rd

Gabe skip-counted by threes, beginning at 24. Could he have said the number 34?

At the Newton Community Bank, there are 7,715 bills in the tellers' cash drawers. In addition, 554 bills are locked in the vault. In total, how many bills does the bank have?

An artist wants to ship 60 sculptures to an art gallery in another city. If he can fit 6 sculptures in each shipping crate, how many crates will the artist need to use?

#### 4th

Some insects called aphids attack a large farm. In response, the farmer releases ladybirds onto the fields. There are 7,514 ladybirds with spots and 8,271 ladybirds without spots. How many ladybirds are there in all?

Josh needs to be at work at 8:35 A.M. It takes him 40 minutes to get ready in the morning and 10 minutes to drive to work. What is the latest time Josh can get up in the morning without being late for work?

Jennifer plans to make 3 litres of blackberry punch and 7 litres of lemon-lime punch for the class party. One litre of punch will serve 3 students at the party. How many students will Jennifer's punch serve?

A crayon company recently changed its labels. It currently has 515 crayons with the old label and 211 crayons with the new label. How many crayons does the company have in stock?

#### 5th

Shawn bought metal rods that are each 3.4 centimetres long. If Shawn lines up 6 of them end-to-end, how long will the line be?

The city spent €9,176.00 to build a new basketball gym and €9,087.00 to build a new swimming pool. How much more did the city spend on the gym than on the pool?

6,011 zebra mussels ride into Lake Michigan on the bottom of a ship. They find lots of food and no predators, so their population grows. A year later, there are 1,393 more zebra mussels in the lake. How many zebra mussels are there now?

#### 6th

A famous singer has a fan club with members all around the world. Among its members are 455 men and 67 women. How many members does the fan club have?

A hydroelectric plant uses water to create electricity. Before water enters the plant, it passes through two filters. Engineers found a total of 1,654 pieces of litter in the filters. There were 467 pieces of litter in the first filter. How many pieces of litter were in the second filter?

Steven always takes the same route when he walks his dog. First, he walks 4 blocks to the park. Then he walks 6 blocks to the primary school. Finally, he walks 7 blocks to get back home. Steven walks his dog 4 times each day. How many blocks does Steven's dog walk each day?

# Maths Problem Solving Strategies

**Use a table or  
chart.**

**Break problem into  
smaller parts.**

**Make a  
Model.**

**Use  
objects.**



**Think  
logically.**

**Work Backwards.**



# Problem Solving

Have a Go!

Share your ideas

Can you make any connections?

Take on a challenge!

What did I learn from my mistake?

Don't give up!

Share the solution!

How can you record this?

Make a plan for next

**R** Read



**A** Attend to key words



**V** Visualise



**E** Estimate



**C** Choose numbers



**C** Calculate



**C** Check



# Matty's Maths Mysteries

