



**Ebook Code:**  
**RENZ0021**



# Mad Maths

for 6 to 8 year olds

# Book 1

Stimulating problem solving  
activities for students aged  
6 to 8 years.

Written by Greg Mitchell. Illustrated by Terry Allen.  
© Ready-Ed Publications - 2001

Published by Ready-Ed Publications P.O. Box 276 Greenwood WA 6024  
Email: [info@readyed.com.au](mailto:info@readyed.com.au) Website: [www.readyed.com.au](http://www.readyed.com.au)

#### **COPYRIGHT NOTICE**

Permission is granted for the purchaser to photocopy sufficient copies for non-commercial educational purposes. However this permission is not transferable and applies only to the purchasing individual or institution.

ISBN 1 87526 882 0

# Contents

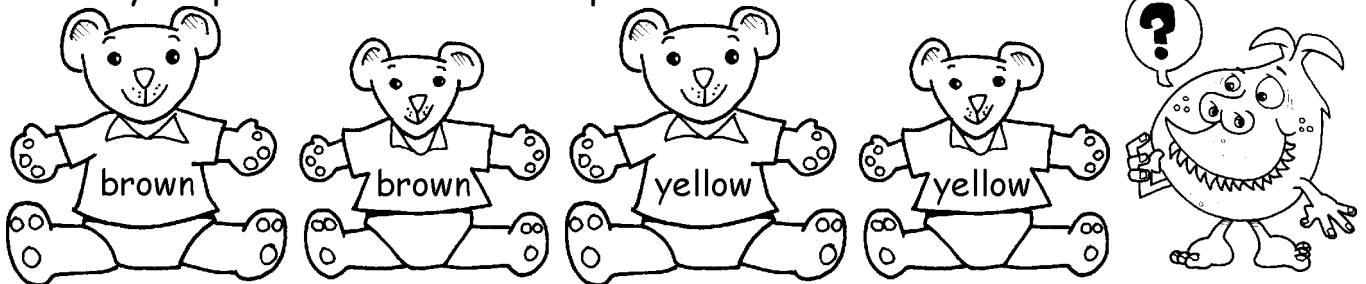
<b>Worksheet</b>	<b>Curriculum Strand: Sub-Strand: Learning Outcome</b>	<b>Page</b>
	Teachers' Notes	2
1	Number: Applying Numbers - 2.14a: Uses pictorial and verbal descriptions as clues in solving problems.	4
2	Number: Number Patterns - 2.12: Recognises and utilises rules used to generate number sequences.	5
3	Number: Count and Order - 2.11: Uses diagrams to solve problems related to basic operations.	6
4	Number: Count and Order - 2.11: Uses diagrams to solve problems related to basic operations.	7
5	Number: Applying Numbers - 2.14a: Uses diagrams and stories as visual and textual clues to problem solving.	8
6	Number: Number Patterns - 2.12: Recognises and describes patterns involving number combinations.	9
7	Space: 2.9: Distinguishes between circles, rectangles, triangles and squares.	10
8	Number: Applying Numbers - 2.14a: Uses pictures/diagrams to solve problems involving number operations.	11
9	Space: 2.10: Uses multiple copies of shapes to construct repetitive patterns.	12
10	Number: Applying Numbers - 2.14a: Uses counting strategies to solve story problems.	13
11	Space: 2.9: Recognises and uses shapes and patterns.	14
12	Space: 2.10: Identifies cubes as 3D objects with 6 faces.	15
13	Number: Mental Computation - 2.15: Reads, writes and counts with whole numbers.	16
14	Space: 2.8: Determines paths on informal maps and diagrams.	17
15	Number: Applying Numbers - 2.14b: Uses diagrams representing situations involving different priced objects.	18
16	Number: Applying Numbers - 2.14a: Solves number problems involving simple number combinations.	19
17	Measurement: Measuring - 2.19: Compares volumes of objects; uses uniform units of measure.	20
18	Measurement: Measuring - 2.19: Uses story and diagrams to determine relative areas of objects.	21
19	Number: Number Patterns - 2.12: Recognises and describes number patterns.	22
20	Number: Applying Numbers - 2.14a: Solves number problems involving simple number combinations.	23
21	Number: Count and Order - 2.11: Uses diagrams to solve symbolically expressed basic operations.	24
22	Chance and Data: Interpreting Data - 2.26: Interprets data from graphs using pictorial information.	25
23	Number: Applying Numbers - 2.14a: Recognises patterns using constant addition of whole numbers.	26
24	Number: Count and Order - 2.11: Solves number problems involving simple number combinations.	27
25	Number: Applying Numbers - 2.14a: Solves number problems using multiplication.	28
26	Number: Applying Numbers - 2.14a: Solves number problems using multiplication and division.	29
27	Number: Count and Order - 2.11: Reads and writes numbers in order; counts on and back from numbers.	30
28	Number: Mental Computation - 2.15: Works with multiplication to solve place value problems.	31
29	Measurement: Measuring - 2.19: Compares & orders things by length; uses uniform units to solve problems.	32
30	Measurement: Measuring - 2.19: Compares & orders things by length; uses uniform units to solve problems.	33
31	Number: Number Patterns - 2.12: Solves number problems involving basic operations.	34
32	Number: Count and Order - 2.11: Recognises face value of numbers; uses multiplication to solve number problems.	35
33	Measurement: Measuring - 2.19: Compares and orders objects by mass.	36
34	Number: Number Patterns - 2.12: Uses diagrams to represent situations involving comparison of numbers.	37
35	Measurement: Measuring - 2.19: Uses uniform units of measure to order and compare lengths.	38
36	Measurement: Time - 2.21: Uses uniform units of measure to order and compare time.	39
37	Measurement: Time - 2.21: Uses uniform units of measure to calculate time and volume.	40
38	Measurement: Time - 2.21: Uses uniform units of measure to order and compare mass.	41
39	Measurement: Time - 2.21: Uses a calendar as a unit of measure to order and compare time.	42
40	Number: Applying Numbers - 2.14b: Uses diagrams to compare groups and solve number problems involving money.	43
41	Measurement: Measuring - 2.19: Uses informal units of length to solve problems.	44
	Answers	45 - 48

Name: \_\_\_\_\_

## Worksheet 2

Bonzo Monster has lots of teddy bears (he has twice as many bears as he has teeth). He has big bears and small bears and he likes yellow bears and brown bears best of all.

One day he put out his bears in a pattern like this ...

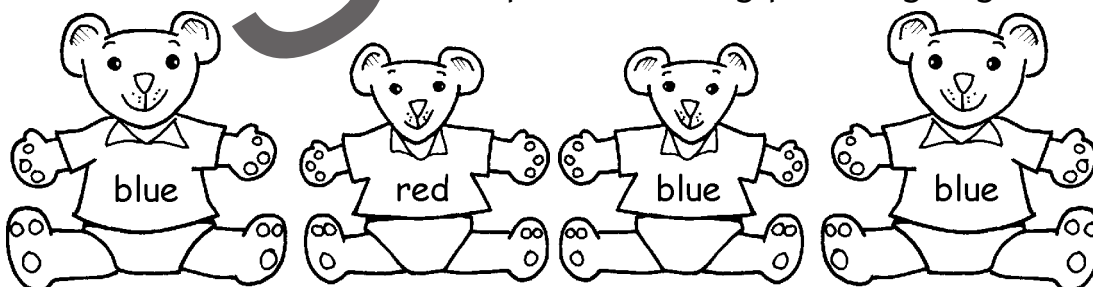


The only trouble was he couldn't think what bear to put next.

"These bears look like they are ready to start in a teddy bear race," said Bonzo. "To start a teddy bear race you have to say 'ready, teddy, go!'"  
(Can you bear these weak jokes?)

### Questions

1. If Bonzo has 15 teeth how many bears does he have? \_\_\_\_\_
2. How many bears would you have if you were Bonzo? \_\_\_\_\_
3. What are Bonzo's favourite colours? \_\_\_\_\_
4. Which bear would come next in the pattern above? \_\_\_\_\_
5. How many bears are in the pattern so far? \_\_\_\_\_
6. Draw the next bear to keep the following pattern going ...



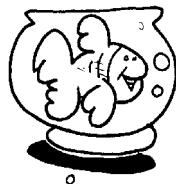
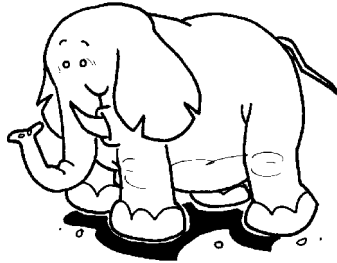
7. Use these colours and sizes to make your own pattern. (Draw it here.)

### Madness

Draw a pattern with your favourite type of toys.

Name: \_\_\_\_\_

## Worksheet 8



Pete, Pat and Pam all went to Ms Zoo's pet shop and bought a pet each. There were only three pets - an elephant, a cat and a goldfish. Pat bought the biggest pet he could find. Pete bought something to swim in the bath with him. Pam liked what was left over so she took that.

Pat said, "What time will it be if my pet tries to have a swim in the bath with me?"

No one knew.

"Time to get a new bath!"

### Questions

1. What pet did Pete buy? \_\_\_\_\_
2. What pet did Pat buy? \_\_\_\_\_
3. What pet did Pam buy? \_\_\_\_\_
4. If Pam bought the elephant, what pet would Pat have to have?  
\_\_\_\_\_
5. If the pets cost more the bigger they got, which would be the most expensive? \_\_\_\_\_
6. If the goldfish cost \$3, how much would the cat cost if it was double that price? \_\_\_\_\_  
What would the elephant cost if it was worth one hundred times the goldfish? \_\_\_\_\_
7. What names would you call these pets? \_\_\_\_\_  
\_\_\_\_\_

### Madness

If you could have any pet (no matter what) what would you choose?  
Draw it on the back of this sheet.

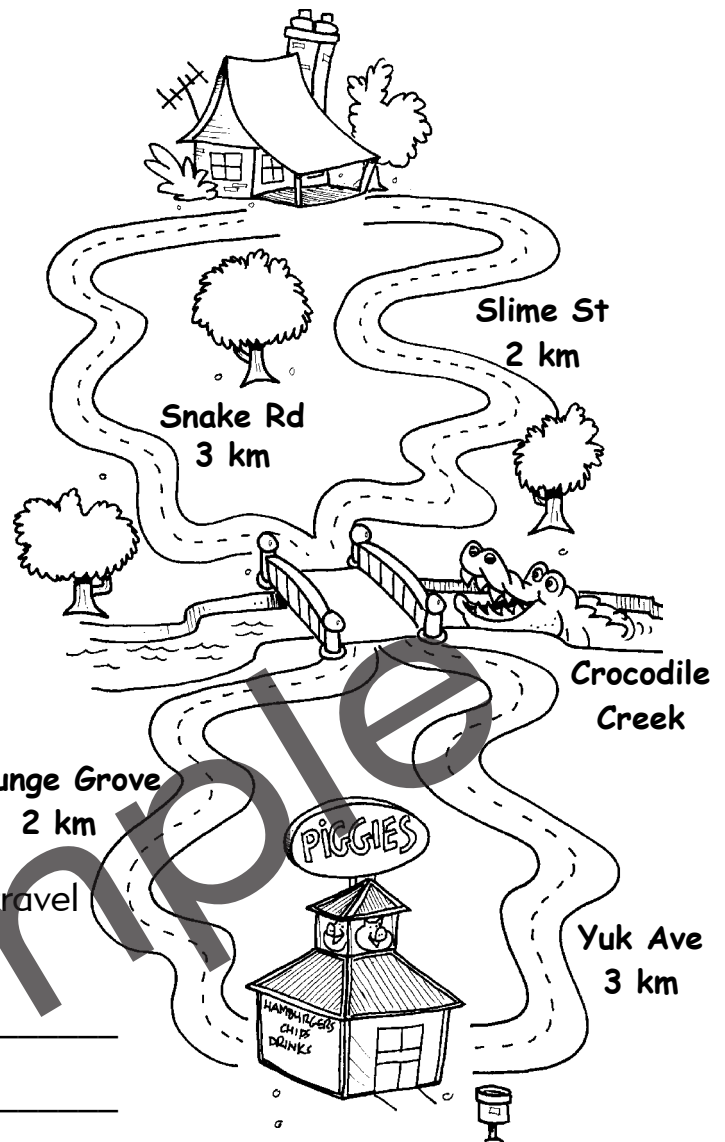
Name: \_\_\_\_\_

## Worksheet 14

To go for a hamburger, the Rotten family can travel four different ways.

The hamburger place they go to is called 'Piggies' because of what people like the Rottens turn into when they eat there. After they buy their hamburgers the Rottens like to sit by the pool and watch the crocodiles play 'Snap!'

"I know what a crocodile would like in a hamburger," said Daddy Rotten. "... ME!"



### Questions

1. What are the four ways you can travel from the Rottens' to Piggies?

---

---

2. What is the distance for each trip?

---

3. What is the shortest trip?

What is the longest trip?

---

4. If a new one kilometre long road (Blah Street) was built from the Rottens' to the bridge, what would be the shortest way to Piggies then? How far?

---

### Madness

Make up a recipe or three for hamburgers for different animals or people ... like a Crocburger or a Rotten burger.

Name: \_\_\_\_\_

## Worksheet 16

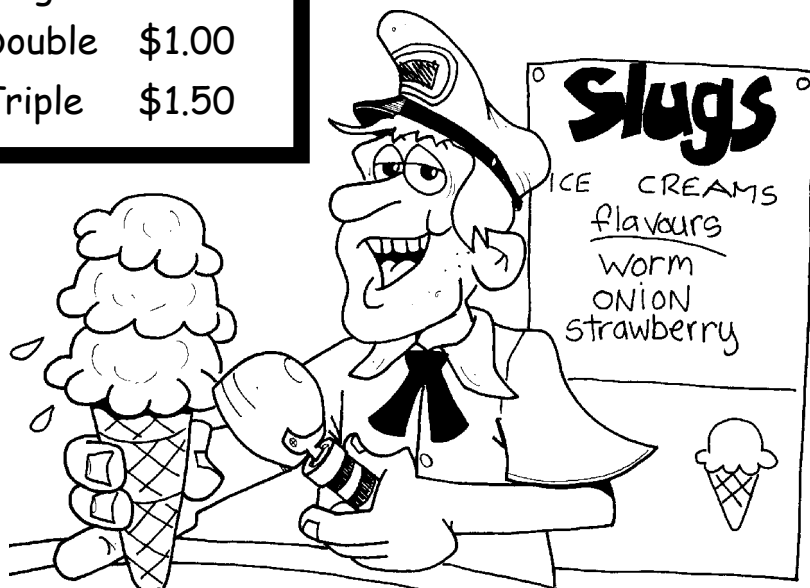
At Slug's Ice-cream Palace Slug has only three flavours to choose from ... **strawberry, worm or onion.**

Slug sells triple, double and single scoops.

For some reason though, Slug only seems to sell one flavour in all his scoops.

*I wonder why?*

Single	50¢
Double	\$1.00
Triple	\$1.50



### Questions

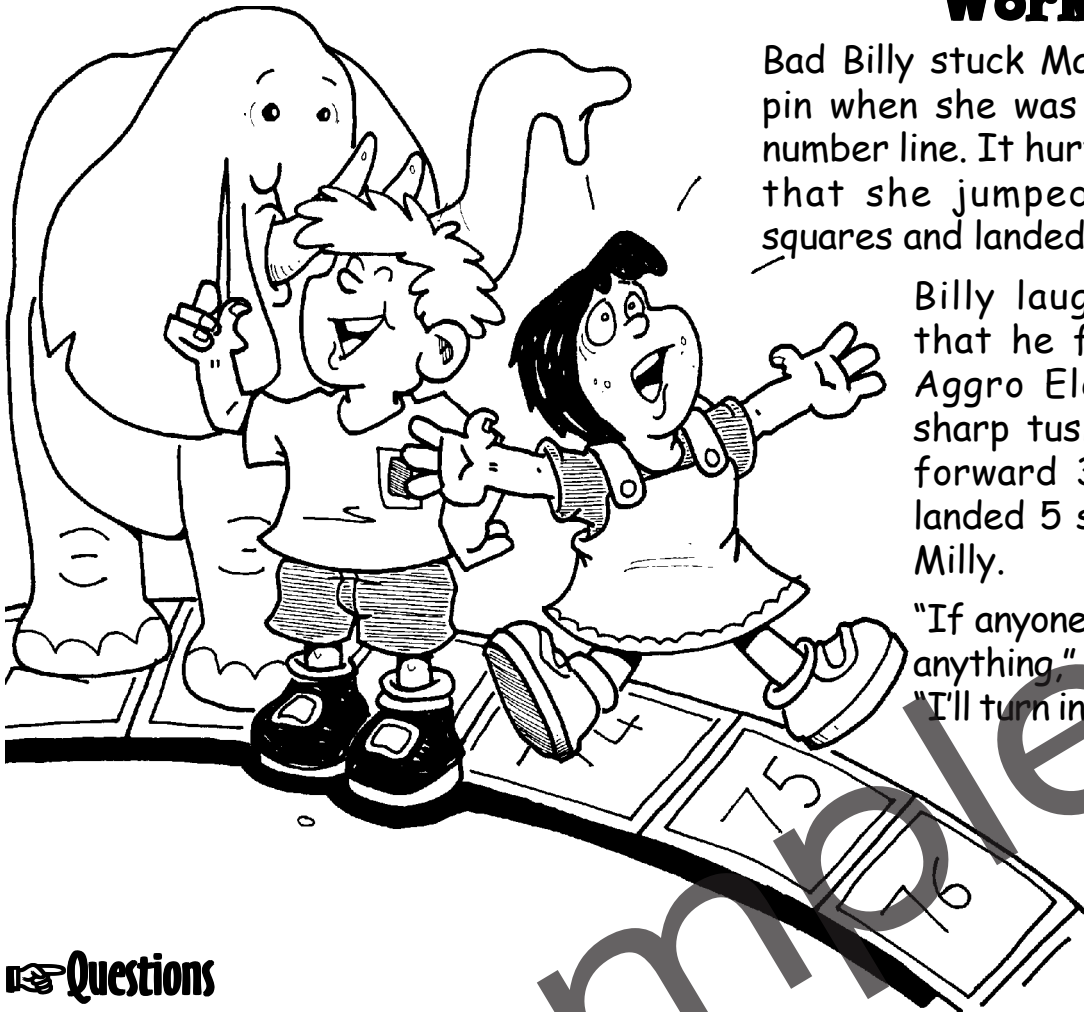
1. What would be the most favoured flavour? \_\_\_\_\_  
Why? \_\_\_\_\_
2. What are the possible double scoop combinations? (You can have the same flavour twice.)  
\_\_\_\_\_  
\_\_\_\_\_
3. What are the possible triple scoop combinations? \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_
4. What is the total number of different types of ice-creams you can have?  
\_\_\_\_\_
5. How much would one scoop cost? \_\_\_\_\_
6. If **snail** was added to the ice-cream flavours, how many different combinations would there be then, if you were allowed each flavour only once?  
\_\_\_\_\_

### Madness

Think up some really good ice-cream flavours like steak and eggs ice-cream.  
Draw up a flavour chart and price list.

Name: \_\_\_\_\_

## Worksheet 27



Bad Billy stuck Mad Milly with a pin when she was standing on a number line. It hurt Milly so much that she jumped forward 22 squares and landed on number 94.

Billy laughed so much that he fell back onto Aggro Elephant's very sharp tusks. He jumped forward 30 spaces and landed 5 spots ahead of Milly.

"If anyone sticks me with anything," Aggro thought, "I'll turn into a jumbo jet."

### Questions

1. What number was Milly standing on when Billy jabbed her? \_\_\_\_\_
2. Where was Billy when he sat on Aggro's tusks? \_\_\_\_\_
3. Where would Milly have landed if she had jumped backwards? \_\_\_\_\_
4. Where would Billy have landed if he had jumped backwards? \_\_\_\_\_
5. How many more squares did Billy jump than Milly? \_\_\_\_\_
6. What was the total number of squares jumped by Billy and Milly? \_\_\_\_\_
7. If Aggro was on number 35 and was stung by a bee and went forward 26 squares, which number would she land on? \_\_\_\_\_
8. If each square was two metres across how far would Aggro have travelled?  
\_\_\_\_\_

### Madness

Find a flat space with plenty of room in front of you. Leave something to mark where you started and take a hundred large steps in a straight line. That is about how long a 100 metre number line is!