

NAME.....

CLASS....

## MATHS CHALLENGE 1 YR6

### SOLUTION

Pat had 5 dice that he rolled together.



Roll	Die 1	Die 2	Die 3	Die 4	Die 5
1	<b>4</b>	<b>2</b>	<b>1</b>	<b>3</b>	<b>5</b>
2	<b>6</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>1</b>
3	<b>2</b>	<b>4</b>	<b>3</b>	<b>1</b>	<b>6</b>
4	<b>5</b>	<b>3</b>	<b>6</b>	<b>2</b>	<b>1</b>

Pat wrote down the numbers he rolled each time in this table. He then used the numbers rolled to make different 5-digit numbers.

1. What is the total of the maximum numbers he could make for each roll?

$$54321+65431+64321+65321=249394$$

2. What is the total of the minimum numbers for each roll?

$$12345+13456+12346+12356=50503$$

3. What is the difference between the 2 totals?

$$249394-50503=198891$$

4. What is the sum of the 2 totals?

$$249394+50503=299897$$