Grade 5 Multiplication Test (Chapter 6) Name:

1. Show three new multiplication facts that can be made from 5 X 8 = 40 (Chunking, doubling, half & double, multiples of ten etc). 6 marks

2. Joe fills a box with six muffins.
   a) How many muffins does he need to fill eight boxes? **Use the fact 5 X 8 to locate the product of 6 X 8**. Use an array or show calculations using mental math (show steps). 1 mark

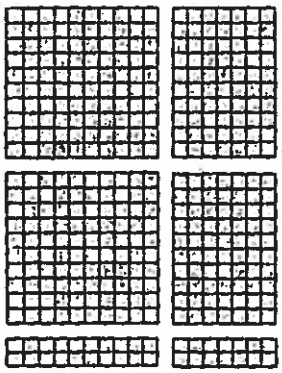
   b) How would the number change if he fills nine boxes? Use mental math and the multiples of ten to relate 10 X 6= 60 to locate 9 X 6). 1 mark

3. Use a sketch to show that 18 X 50 = 9 X 100, by using the half and doubling strategy. (2 marks)

4. How much greater is 4 X 96 than 4 X 90? How do you know, show the steps of mental math strategy. 2 marks

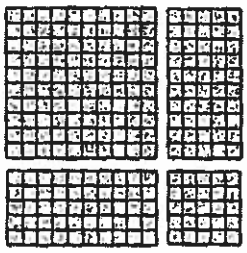
5. One boat can hold 15 passengers to ferry them across a lake. **About** how many passengers can 21 boats hold? Show 2 different ways to estimate an answer for 15 X 21. (2 marks)

6. Calculate using the expanded form strategy. Show all the steps.



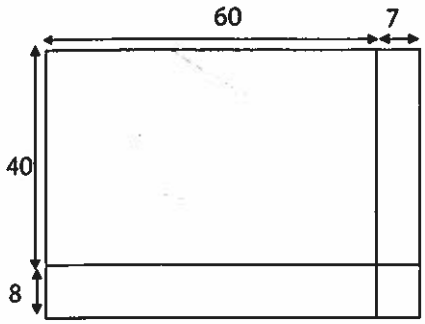
20 + 2 X 10 + 7

b) 15 X 15



10 + 5 X 10 + 5

7. What multiplication does this array show? Calculate the product and show all the steps of expanded form calculations. 3 marks.



8. **Sketch an array to model each multiplication. Calculate each product. (3 marks)**
   a) 32 X 47 **b) 58 X 23**

9. **Choose your own strategy to calculate (show all your work). Then show if your product is valid by using an estimate. 4 marks.**

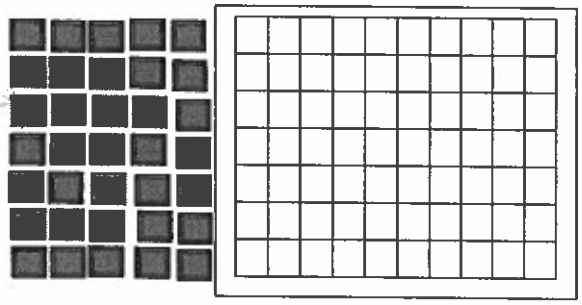
a) 22 X 66 **estimate:** **b) 43 X 91** **estimate:**

10. Use the half and double strategy, show your work:

a) 50 X 12= **b) 200 X 25=** **(hint do it twice)**

11. Use the Chunking strategy to make this array easier to calculate 15 x 7
Explain the array and show the steps to answer. 2 marks

5 X 7 + 10 X 7



12. Using the short "old school" method, multiply and show your regrouping.

Josie's heart beats 73 times in a minute. (6 marks). Write a sentence for each.

a) How many times in 12 minutes

	7	3	
X	1	2	
			(2 X 73)
+			(10 X 73)

b) In 35 minutes?

	7	3	
X	3	5	
			(5 X 73)
+			(30 X 73)

C) in 41 minutes?

	7	3	
X	4	1	
			(1 X 73)
+			(40 X 73)