**Mental Math Practice**

**Double & Half for Multiplication**

Double & Half is used when at least one factor of a multiplication problem is even. You can cut the even factor in half and double the other factor. This strategy can be used to make a multiplication problem easier. You can even keep on halving and doubling, if it helps. (Just remember, however many times you double one factor is how many times you need to half the other factor).

**Example 1: To solve 6 x 45:**

 Begin by halving the factor 6 (divide by 2) 🡪 3

 Then double the factor 45 (multiply by 2) 🡪 90

 Lastly multiply the two new factors together 🡪 3 x 90 = \_\_\_\_\_

 Think 3 x 9 = 27

 So 3 x 90 = 270

 Therefore 6 x 45 = 270

**Example 2: To solve 18 x 8 using this strategy:**

 Begin by repeatedly halving 8 🡪 4 🡪 2

 Then repeatedly doubling 18 🡪 36 🡪 72

 Lastly multiply the two new factors – 2 x 72 = 144

 Therefore 18 x 8 = 144

Practice: How many can you do in 3 minutes? Score:\_\_\_\_\_\_\_\_\_

1. 4 x 17 = \_\_\_\_\_\_\_
2. 6 x 45 = \_\_\_\_\_\_
3. 5 x 68 =\_\_\_\_\_\_\_
4. 35 x 4 = \_\_\_\_\_
5. 25 x 16 = \_\_\_\_\_
6. 125 x 12 =\_\_\_\_\_
7. 8 x 13 = \_\_\_\_\_
8. 12 x 150 = \_\_\_\_\_\_
9. 8 x 45 = \_\_\_\_\_\_
10. 55 x 6 = \_\_\_\_\_\_
11. 5 x 120 = \_\_\_\_\_\_
12. 50 x 84 = \_\_\_\_\_\_