_____**name:**_____

Multiplication and Patterning Review

We have a POattering and Multiplication quiz on Tuesday, October 12.
It should be pretty straightforward. All questions will be drawn from things we have seen and done in class. No tricks! Though there will be a few bonus questions for those of you who would like a challenge. The review questions below should cover everything that will be on the quiz. I encourage you to print these pages out and complete them with pencil/paper over a couple of days.

Part 1:

Define the following Patterning and Multiplication terms
(you may look them up online, but please put them in your own words):

Pattern:_____

Pattern Rule:_____

Growing Pattern:_____

Shrinking Pattern:_____

Term:_____

Array:_____

Area model:_____

Product:_____

Part 2

Choose **one** of the numbers listed below and tell me (or show me) as many facts as you can about this number. You can tell me anything you like about your number: addition, subtraction, multiplication and division facts; write the number in different forms, tell me whether your number is even or odd; where your number appears in real life; you can even represent your number visually by including images (on page 2)... anything goes!

33, 180, 999

Part 3

Arrange these numbers from **least** to **greatest**

41046, 46410, 34041, 10446, 40641

_____

Decompose the number 90781, then represent it in expanded form and word form.

_____

What digit is in the thousands place? _____

Complete the following patterns by filling in the missing numbers.

a) 0.5, 1.2, 1.9, 2.6, 3.3, 4.0, 4.7, ___, 6.1

Explain the pattern rule for pattern a):_____

b) .54, .74, .94, _____, 1.34, ___, 1.74, 1.94, ___

Explain the pattern rule for pattern b)_____

Answer the following questions to the best of your abilities. Record your responses beneath the image and/or show your work as needed

Question 3

Figure 1 Figure 2 Figure 3

a. If this pattern continues, how many triangles and how many trapezoids will there be in Figure 8?
b. Create a table or chart to show the pattern.
c. Identify the pattern rule.
d. Use the rule to solve the problem.

	triangles	trapazoids
Step 1		
Step 2		
Step 3		

Part 4

1.

Solve the problem 17 x 4 using the area model

ones x ones 7 x 4 =	ones x tens 10 x 4 =

Now add them up!

Total =

2.

Solve the problem 64 x 7 using the area model

__x__ =	__ x __ =

Now add them up!

Total =

3.

Solve the problem 35 x 29 using the area model

ones x ones 5 x 9 =	ones x tens 5 x 20 =
tens x ones 30 x 9 =	tens x tens 30 x 20 =

Now add them up!

Total =

4.

Solve the problem 39 x 36 using the area model

__ x __ = __	__ x __ =___
_ x __ = ___	__ x __ = ___

Total =

Solve each multiplication problem using the standard algorithm.

73 x7	64 x6	74 x 8
86 x37	54 x24	876 x28

Part 5

Word problems

Ms. Ritchie ordered one box of cookies for her class. Each box contains 26 cookies. Instead of one box, however, she was sent an entire crate of cookies, which contains 30 boxes. How many cookies did Ms. Ritchie end up with? Show your work or explain your thinking.

Larry invested $37 dollars in the Roblox game company. When he withdrew his money, it had quadrupled (multiplied by four). How much money did Larry end up with? Show your work and explain your thinking.