

Name: _____

Unit 12 Review Sheet

Test on Tuesday, May 28

Topics included:

- Identifying and describing patterns
 - Extend patterns
 - Function tables (finding rule, completing tables)
 - Equations and Expressions
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1) Draw a **repeating numerical** pattern in the space below:

2) Draw a **growing geometric** pattern in the space below:

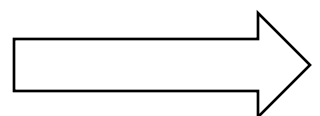
3) Draw a **shrinking numerical** pattern in the space below:

4) If the increasing (growing) pattern continues, what is the seventh number in the pattern? 1, 5, 10, 16, 23, 31, _____

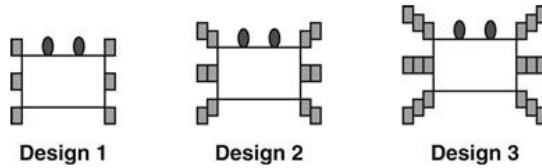
5) Describe the rule for the sequence: 0, 7, 14, 21, 28 _____

6) Oliver is counting colonies of bacteria for his biology class. The number of colonies triples every two days. If there are 47 colonies on Monday, how many colonies should there be at the same time on Friday?

- a. 1,269 colonies
- b. 141 colonies
- c. 423 colonies
- d. 188 colonies



Sid is working on a bug design pattern for the logo of a pest control company. The first design has a rectangular body and 6 legs shaped like rectangles. In each new design, the number of rectangles of the legs increases, as shown.



7) If the pattern continues, what is the total number of rectangles needed to make the legs in Design 5?

8)

X (input)	Y (output)
3	9
4	12
5	15

Rule: _____

9) Complete the function table if the rule is $2E - 1$:

E (input)	Y (output)
10	19
	29
25	
30	

10) Identify the variable and the value of the variable: $D + 3 = 10$

11) Identify the variable and the value of the variable: $6c - 3 = 15$

12) Nick is paid \$6.00 per hour, and last week he earned \$150. What does the x represent in the equation $6x=150$?

- The number of hours Nick worked last week
- The number of days Nick worked last week
- The number of days Nick worked last month
- The number of hours Nick worked yesterday

Write an equation to match the story problem:

13) Nicole had 13 plums. She gave 6 plums to her friend. She now has 7 plums.

Equation:

14) Juan had 30 pieces of Halloween candy. He gave some to his brother. He now has 22 pieces of candy.

Equation: