

Name _____

1. Charlene and Luke play a game with scoring tags as shown below. They follow the rule "Add 5."



- A. What number belongs on the front of the blank scoring tag? Explain.

- B. Describe two features of the pattern.

2. There are 8 juice boxes in each package. Two packages contain 16 boxes. Match the number of packages to the number of boxes. The rule is "Multiply by 8."

	48 boxes	32 boxes	120 boxes	160 boxes
4 packages	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
20 packages	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6 packages	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
15 packages	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

3. Use the rule "Multiply by 4" to continue the pattern. Then describe a feature of the pattern.

Number of Campfires	1	2	4	7
Number of Logs	4	8	16	

4. Use the rule "Multiply by 2" to continue the pattern. Then write 4 terms of a different pattern that follows the same rule.

8, 16, 32, _____, _____

5. Nadia arranges her stuffed animals by height. Each is 7 cm taller than the last. The first is 9 cm tall and the last is 65 cm tall. Her brother Ralph says that all of the stuffed animals have an odd number as their height. Is Ralph correct? Find the height of each stuffed animal to explain.

6. The rule for the repeating pattern is "2, 8, 2, 6, 3." Write the next three numbers in the pattern. Then tell what will be the 23rd number in the pattern. Explain.

2, 8, 2, 6, 3, 2, 8, 2, _____, _____, _____

7. Samuel wrote different patterns for the rule "Add 7." Select all of the patterns that he could have written. Then write 4 terms of a different pattern that follows the same rule.

- 1, 7, 14, 21, 28 70, 63, 56, 49, 42
 7, 14, 21, 28, 35 51, 44, 37, 30, 23
 3, 10, 17, 24, 31

8. The rule is "Subtract 4." What are the next three numbers in the pattern? Describe two features of the pattern.

48, 44, 40, 36, 32, 28, ...

9. The table shows the different numbers of bracelets formed by different numbers of links. The rule is "Divide by 9."

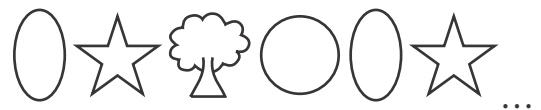
Links	36	45	81	108
Bracelets	4	5	<i>b</i>	12

- A. How many bracelets can be formed with 81 links?

_____ bracelets

- B. How many links are there in 15 bracelets? How do you know?

10. A. Select all the true statements for the repeating pattern. The rule is "Oval, Star, Tree, Circle."



- The next shape is an oval.
 The tree is the 3rd, 7th, 11th, etc. shape.
 The 15th shape is the circle.
 The circle only repeats once.
 The 10th shape is the star.

- B. How many trees are there among the first 26 shapes?