Test practice/review:

Length measurement:

1. What does indirect comparison mean (CCSS.MATH.CONTENT.1.MD.A.1

Order three objects by length; *compare the lengths of two objects indirectly by using a third object*.)

2. Explain how to measure using non-standard length unit (explain the process and the key ideas)

3. Explain what makes a standard unit standard.

4. When you are in the classrooms at UWRF, you are typically sitting at a square table. Use your memory of sitting at a table to estimate the length of one side of the table. Explain your thinking process.

5. Give two benchmark comparisons that help you remember how long a centimeter is.

6. Write a comparison problem that uses length measurements.

Area and perimeter:

7. Figure out the missing side lengths and find the area and perimeter of the shape:



8. Find the missing side lengths:

a. b.

9. Draw 3 rectangles that have the same area and different perimeters.

Repeating patterns:

10. If you are showing an ABBA pattern with pattern blocks, how many blocks of the pattern should you show so that children can figure out and understand what the pattern is?

11. A numbered repeating pattern starts:

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 |

a. What are the next 4 places where the pattern will have a square?

b. Describe the skip count pattern for the numbers corresponding to squares.

12. Fill in these skip counting puzzles. Explain how you did decided what to do:

a. \_\_\_\_, \_\_\_, 11, 14, 17

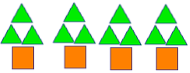
b. 4, \_\_\_, 10, \_\_\_ , 16

Growing patterns:

13. Make a table for this pattern block growing pattern. Describe how the patter grows visually, and how the numbers grow in the table.



14. For these pattern block trees, answer the following questions and explain how you got your answers:



a. If there are 12 trees in the forest, how many pattern blocks will you use?

b. If you make trees with 24 green triangles, how many squares will you need?

c. Can you make a set of trees using exactly 16 green triangles?

15. Examine my growing pattern.



a. If you made the next version of this pattern (with 4 yellow hexagons), how many green triangles would it have?

b. If you made a version with 10 yellow hexagons, how many green triangles would you need? Explain how you figured it out.