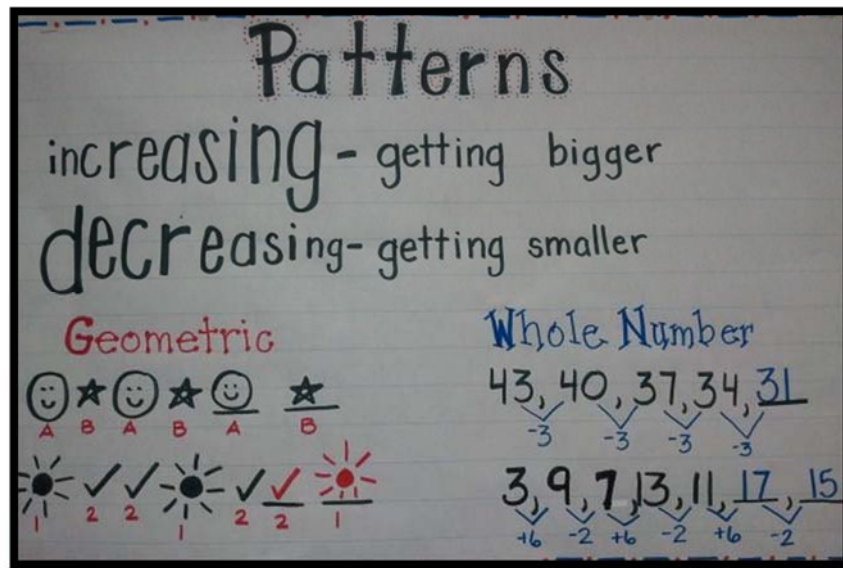


Patterns Study Guide



Geometric Patterns: Growing and Repeating

Try it out! Finish the last two patterns.

E w 3 m E w 3 m _____

1 2 3 3 2 1 1 2 3 3 2 _____

△ ▽ ▽ △ ▽ ▽ △ _____

Can you create your own geometric pattern?

Number Patterns and Sequences

Try it out! Find the missing number and write the rule.

2, 4, 6, 8, 10, ____ Rule: _____

5, 9, 13, 17, 21, ____ Rule: _____

80, 70, 60, 50, 40, ____ Rule: _____

Can you create your own number pattern?

Input and Output Tables

Remember, input and output tables are just like machines! You put a number in and a new number comes out. Look at the tables below and answer the questions.

| | | | | |
|-----|---|---|---|----|
| In | 5 | 8 | 9 | |
| Out | 0 | | | 10 |

Fill in the missing numbers using the rule.

rule: subtract 5

| | | | | |
|-----|---|----|---|----|
| In | | 8 | 9 | 11 |
| Out | 9 | 12 | | |

Fill in the missing numbers using the rule.

rule: add 4

| | | | | |
|-----|---|----|----|----|
| In | 3 | | 8 | 13 |
| Out | 6 | 10 | 11 | 16 |

Find the rule and then fill in the missing numbers.

rule:

| | | | | |
|-----|---|---|---|---|
| In | 3 | 6 | 7 | |
| Out | 1 | 4 | | 8 |

Find the rule and then fill in the missing numbers.

rule:

Can you create your own input and output table?

| | | | | |
|--------------|--|--|--|--|
| <i>In</i> | | | | |
| <i>Out</i> | | | | |
| <i>Rule:</i> | | | | |