Divisibility Patterns

Lesson 17

Divisibility Pattern for 2

- The number must be even.
- The last digit is 0, 2, 4, 6, or 8.
- Write a 4-digit number that is divisible by 2.

Divisibility Pattern for 4

- The number must be even.
- The last two digits must be divisible by 4. (00, 04, 08, 12, 16, 20, 24, 28, 32, 36…)
- Write a number that is a multiple of 4. Circle the last 2 digits.

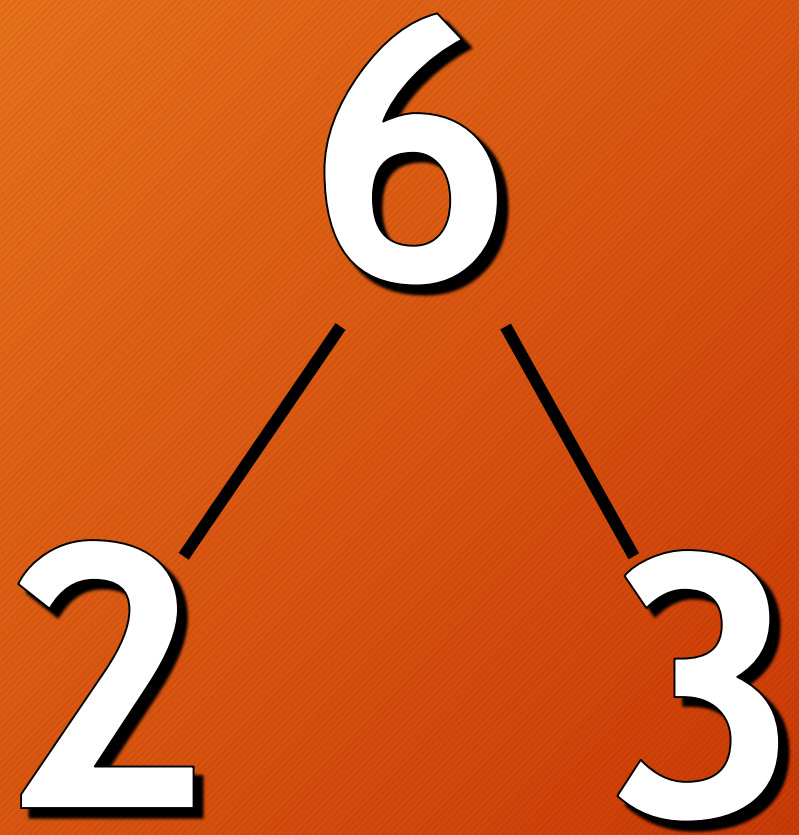
Divisibility Pattern for 5

- The last digit of the number must be 5 or 0.
- Write a 4-digit number that is a multiple of 5.

Divisibility Pattern for 10

- The last digit of the number must be a 0.
- Write a 4-digit number that is a multiple of 10.

Divisibility Pattern for 6



- Decompose 6 into its factors to find the pattern.
- The number must be divisible by 2 AND 3.

Divisibility Pattern for 8

- The last THREE digits of the number must be divisible by 8. (008, 016, 024, 032…)

Divisibility Pattern for 3

- Show 36 using your Cuisenaire rods.
- Write a number sentence which shows the model.

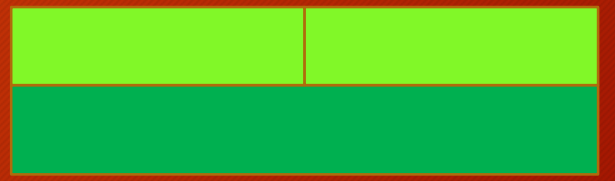
Divisibility Pattern for 3

- Replace the 10s with a 1-rod and a 9-rod.
- Draw this model in your notes.
- Write a number sentence to show this new model.

Divisibility Pattern for 3

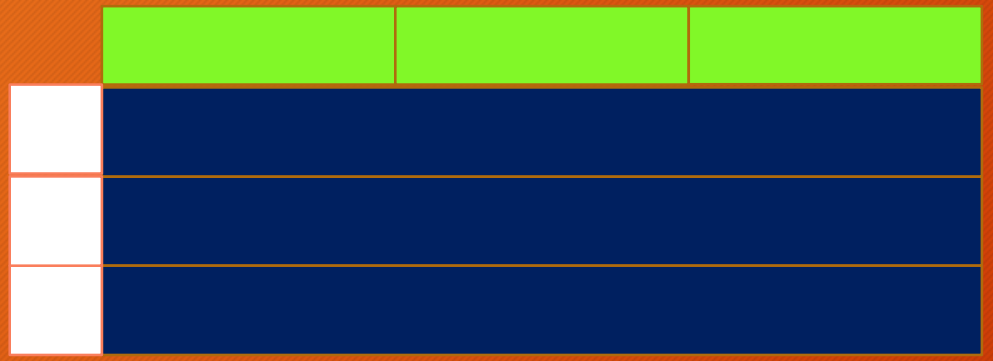
- Use 3-rods to show that 9 is divisible by 3.

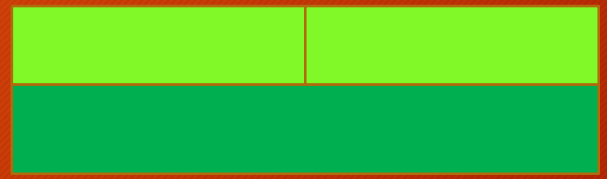
- Use 3-rods to show that 6 is divisible by 3.



Divisibility Pattern for 3

$$3(1+9) + 6 =$$

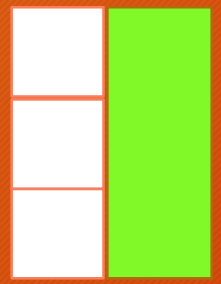


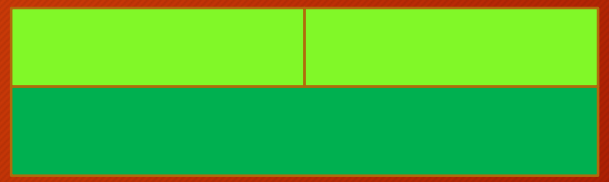


$$3(1) + 3(9) + 6 =$$

Divisibility Pattern for 3

3 + 6 =





Divisibility Pattern for 3

- The sum of all digits is divisible by 3.
- 2,035
- 3,252

Divisibility Pattern for 9

- The sum of all digits is divisible by 9.
- 1,035
- 2,556

Divisibility Pattern for 7

- Take the last digit in a number.
- Double and subtract the last digit in your number from the rest of the digits.