

Enrichment Packet #5

Due: Monday 10/8

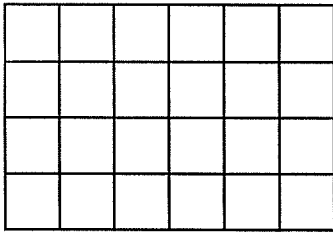
NAME: _____

How Does Your Garden Grow?

Area is the name for the number of square units that are in a given space. You can figure out the area of a rectangle as you would an array. You can also break apart a rectangle to form different combinations and still have the same area.

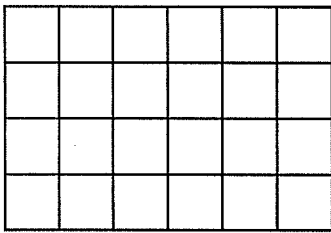
Visual Thinking

Here is Mary's garden: $4 \times 6 = 24$ square units.



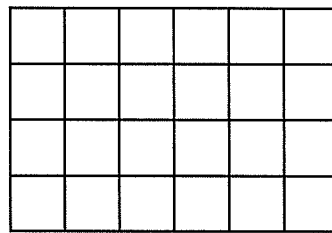
Draw lines and write the first letter of the flower to show several possible planting plans.

1.



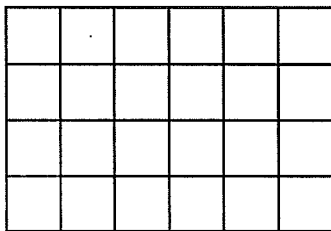
$2 \times 6 =$ tulips
 $2 \times 4 =$ roses
 $2 \times 2 =$ marigolds

2.



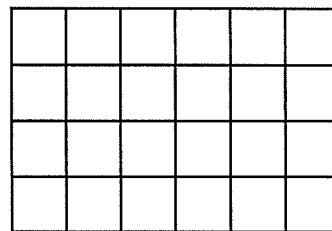
$4 \times 4 =$ tulips
 $2 \times 2 =$ roses
 $2 \times 2 =$ marigolds

3.



$3 \times 4 =$ tulips
 $1 \times 6 =$ roses
 $3 \times 2 =$ marigolds

4.



$4 \times 5 =$ tulips
 $3 \times 1 =$ roses
 $1 \times 1 =$ marigolds

Recycling Numbers

Miles and Cynthia participated in a weeklong recycling project. Cynthia collected 4 cans every day, and Miles collected 3 cans every day.

Patterns

- Fill in the table to show how many cans each student has collected by the end of each day.

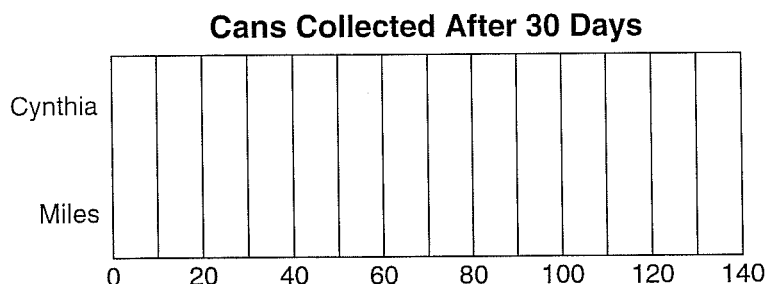
Days	1	2	3	4	5	6	7
Miles	3	6					
Cynthia	4	8					

- At the end of the week, how many cans did Cynthia collect?

- At the end of the week, how many cans had Miles collected?

- If the pattern had continued for another week, a total of 14 days, how many cans would Cynthia have collected? How many would Miles have collected?

- The project was such a success, it was continued for 30 days. Complete the bar graph to compare the total cans collected by Miles and Cynthia.



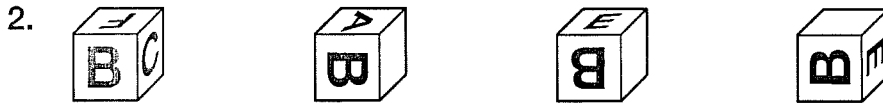
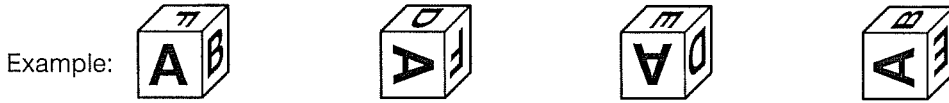
Cube Turning

Visual Thinking

A lettered cube has 6 sides with a different letter on each side. Each letter can be shown in 4 different positions.

1. How many different ways can the cube be displayed?
-

Fill in the missing letters in the position they would be seen on the cube. The first one has been done for you as an example.



Enrichment 3-5

Break the Codes

Visual Thinking

The symbols in each set of problems represent whole numbers. Break the codes.

Hint: Here's how you might break one code.

$@ + \blacktriangle = 27$ $@ + @ = 24$	Think: $@ + @ = 24$ is a double. The two addends are the same, so $@ = 12$. Since $27 - 12 = 15$, $\blacktriangle = 15$.
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1. $\text{S} \times \text{C} = 11$

$\text{C} \times \text{C} = 1$

$\text{S} = \underline{\quad}, \text{C} = \underline{\quad}$

2. $\text{S} \times \text{D} = 33$

$\text{D} \times \text{D} = 9$

$\text{S} = \underline{\quad}, \text{D} = \underline{\quad}$

3. $\text{L} - \text{Y} = 8$

$\text{Y} \times \text{L} = 48$

$\text{L} = \underline{\quad}, \text{Y} = \underline{\quad}$

4. $\text{C} \times \text{R} = 28$

$\text{R} \times \text{R} = 16$

$\text{C} = \underline{\quad}, \text{R} = \underline{\quad}$

5. $\text{H} + \text{M} = 12$

$\text{M} \times \text{M} = \text{H}$

$\text{H} = \underline{\quad}, \text{M} = \underline{\quad}$

6. $\text{A} \times \text{W} = \text{A}$

$\text{A} - \text{W} = 11$

$\text{A} = \underline{\quad}, \text{W} = \underline{\quad}$

7. $\text{C} + \text{C} = 18$

$\text{C} \times \text{C} = 90$

$\text{C} = \underline{\quad}, \text{C} = \underline{\quad}$

8. $\text{I} \times \text{A} = 16$

$\text{F} \times \text{A} = 40$

$\text{A} \times \text{A} = 64$

$\text{F} = \underline{\quad}, \text{I} = \underline{\quad}, \text{A} = \underline{\quad}$