## Backyard Graphing

Description: Use models and pictures to relate concepts of ratio, proportion and percent. Develop common referents for units of measure for length, weight, volume (capacity) and time to make comparisons and estimates.

Keywords: Graphing, Area, Proportion

## Concepts:

- Number, Number Sense \& Operation Standard 5-7 D
- Measurement 3-5 C.


## Materials:

- Pencil
- graph paper


## Instructions:

- Using a sheet of graph paper, draw the outline of your backyard, or other chosen plot of land.
- As accurately as possible, fill in all of the major features of your yard, and their approximate size (for example, garage takes up 8 squares)
- The graph holds 100 squares. If you use all hundred for your yard, each square is one percent. What percentage of your yard is taken up by your garage, garden, etc? What is the ratio of man-made vs. natural in your yard? What percentage of your yard is "free space?"


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Math:

## Backyard Graphing

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My $\qquad$ takes up $\qquad$ squares ( \%)

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My $\qquad$ takes up $\qquad$ squares ( \%)

Man-made things take up $\qquad$ squares ( $\qquad$ \%)

My yard has $\qquad$ empty squares ( $\qquad$ \%)

I would like to add $\qquad$ to my yard. It would take up $\qquad$ squares ( $\qquad$ \%)

Math:

## Possible Interactive Questions:

## What's Going On?

This activity using the skills of measuring, counting, graphing, finding ratios, fractions, percentiles, and making visual interpretations and observations about your surroundings.

## Further Exploration:

1. 

## Relevant Ohio Science Content Standards:

