## Cheese Logic Puzzle

## Grade Level: 4-8

## Lesson Overview

A logic puzzle is a problem that can be solved using deductive reasoning. A deduction is a logical conclusion drawn from two or more true statements. One common type of logic puzzle involves a tool known as an elimination grid. In this activity, students will learn about machines then use an elimination grid to solve a puzzle.

## Student Objectives

1. Practice logical thinking skills utilizing charts to draw conclusions based on information provided while learning about machines.

## Materials

$\checkmark$ Cheese Logic Puzzle worksheet

## Procedure

Allow students time to complete the Cheese Logic Puzzle and then compare answers.

If you have not given your students a logic puzzle previously, you may want to help them understand the steps in finding an answer. Please keep in mind that not all of the information is given. Students should use the information available and the process of elimination to find the answers

## Extension Activities

1. Cud to Curd lesson correlates well with this lesson.

## Standard

## Illinois Mathematics Standard

7.SP.8b: Find probabilities of compound events using organized lists, tables, tree diagrams, and simulation. b. Represent sample spaces for compound events using methods such as organized lists, tables and tree diagrams.

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These mAGic lessons are designed to bring agriculture to life in your classroom. They address the Illinois Learning Standards in math, science, English language arts and social studies.

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Name $\qquad$

## Cheese Logic Puzzle

Six children sat together at a lunch table. Each was eating a different type of cheese. Use the clues to fill out the chart to help you match the child and their favorite cheese. Put your answers at the bottom of the page.

| Student <br> Name | Swiss <br> Cheese | Cheddar <br> Cheese | American <br> Cheese | String <br> Cheese | Mozzarella <br> Cheese | Cottage <br> Cheese |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Bill |  |  |  |  |  |  |
| Anne |  |  |  |  |  |  |
| Patricia |  |  |  |  |  |  |
| George |  |  |  |  |  |  |
| Beth |  |  |  |  |  |  |
| Larry |  |  |  |  |  |  |

- Bill likes to eat his cheese with a spoon, because it is so soft and lumpy.
- Anne sat next to the boy who ate string cheese.
- Patricia likes to eat the cheese with big holes in it.
- Larry eats the cheese that is named after the United States.
- Anne says the name of her cheese rhymes with better because it is the best.

Bill likes $\qquad$ cheese.

Anne likes $\qquad$ cheese.

Patricia likes $\qquad$ cheese.

George likes $\qquad$ cheese.

Beth likes $\qquad$ cheese.

Larry likes $\qquad$ cheese.

## Cheese Logic Puzzle ANSWER KEY

Six children sat together at a lunch table. Each was eating a different type of cheese. Use the clues to fill out the chart to help you match the child and their favorite cheese. Put your answers at the bottom of the page.

| Student <br> Name | Swiss <br> Cheese | Cheddar <br> Cheese | American <br> Cheese | String <br> Cheese | Mozzarella <br> Cheese | Cottage <br> Cheese |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Bill |  |  |  |  |  | YES |
| Anne |  | YES |  |  |  |  |
| Patricia | YES |  |  |  |  |  |
| George |  |  |  | YES |  |  |
| Beth |  |  |  |  | YES |  |
| Larry |  |  | YES |  |  |  |

- Bill likes to eat his cheese with a spoon, because it is so soft and lumpy.
- Anne sat next to the boy who ate string cheese.
- Patricia likes to eat the cheese with big holes in it.
- Larry eats the cheese that is named after the United States.
- Anne says the name of her cheese rhymes with better because it is the best.

Bill likes cottage cheese.

Patricia likes Swiss cheese.

Beth likes mozzarella cheese.

Anne likes cheddar cheese.

George likes string cheese.

Larry likes American cheese.

