

# Coyote Creek Math Challenge

## Logic

You can complete your solution on the BACK of this paper or use your own paper.

To enter the prize draw  
place your solution in the  
**MATH CHALLENGE**  
box at the office!

Don't forget your name  
and division!!

## Introduction to Grid Style Logic Puzzles

- Logic is a way of thinking that is used in many subjects
- Logic is used in all fields of mathematics
- One way of solving logic puzzles is using a grid (like in the board game Clue) to organize all the possible solutions
- When you know one correct solution, you can use the grid to eliminate all the incorrect solutions
- Eventually, you can narrow down all the possible solutions to the one correct solution!
- Each clue of the puzzle tells you information you can mark off in the grid - sometimes it is a correct clue, sometimes it is an incorrect clue.
- Use different symbols to track correct and incorrect clues (it's common to use an X and ✓)

Fill out the chart and table for a complete solution.

# Math Challenge Solution!

Name: \_\_\_\_\_ Division: \_\_\_\_\_

Five sisters all have their birthday in a different month and each on a different day of the week. Using the clues below and the grid, determine the month and day of the week each sister's birthday falls.

1. Paula was born in March but not on Saturday. Abigail's birthday was not on Friday or Wednesday.
2. The girl whose birthday is on Monday was born earlier in the year than Brenda and Mary.
3. Tara wasn't born in February and her birthday was on the weekend.
4. Mary was not born in December nor was her birthday on a weekday. The girl whose birthday was in June was born on Sunday.
5. Tara was born before Brenda, whose birthday wasn't on Friday. Mary wasn't born in July.

	February	March	June	July	December	Sunday	Monday	Wednesday	Friday	Saturday
Abigail										
Brenda										
Mary										
Paula										
Tara										
Sunday										
Monday										
Wednesday										
Friday										
Saturday										

Name	Month	Day