

TABLE OF CONTENTS

What Is <i>Math Detective</i>®?	iv
Key Ideas and Math Topics Charts	vi
Scoring Rubric/Assessment Criteria	viii
To the Student: Why You Should Become a <i>Math Detective</i>®	ix
Sample Problem: The Small Furniture Store	x
<i>Math Detective</i>® Certificate	xiii
 I. NUMBER AND NUMERATION	
1—Latoya’s Vacation	2
2—Eddy’s Dog Shadow	4
3—Who’s Telling the Truth?	6
4—School Supplies.....	8
5—At the Math Fair.....	10
6—The Super Deli.....	12
7—The Party Favors.....	14
8—The Five Wealthy Women.....	16
9—Leafy Lengths	18
 II. PATTERNS	
10—The Family Tree	20
11—Trip to the Theater	22
12—The Toy Factory	24
13—The 35¢ Yummy Bar	26
 III. OPERATIONS	
14—The City Bus	30
15—Eddy’s Achy Ride	32
16—An Apple a Day.....	34
17—Time to Buy a New Clock.....	36
18—The Toy Sale	38
19—Dinner With Ramón.....	40
20—Mr. Papas at the Toy Store	42

IV. GEOMETRY

21—Off to the State Fair	46
22—Luis's Letter	48
23—Annie's Angles Report	50
24—Trip to the Skating Rink	52
25—The Pastry Shop	54
26—Geometry Art	57

V. PROBABILITY

27—The Color Spinner	60
28—The Ice Cream Party	62
29—Summer Reading	64
30—The Missing Symbols	66

VI. STATISTICS

31—Mrs. Applecrumb's Famous Fruit Pies	70
32—Tully Tallies Temper Tantrums	72
33—The Pet Shelter	74
34—The Great Fruit Sale	76
35—Time for Homework	78
36—Zooey Competition	80
37—The Basset Hound Bus Company	82
38—The Shoe Count	84

ANSWERS	87
----------------------	----

TEACHER NOTES	97
----------------------------	----

10—The Family Tree

¹All over the world, many families keep records of their ancestors. ²Ancestors are family members that came before your parents, like your grandparents, great-grandparents, etc. ³Tammy asked Grandma Emma to help her make a family tree. ⁴With her grandmother's help, Tammy was lucky enough to get the names of three generations of her family. ⁵A generation is a set of people about the same age.

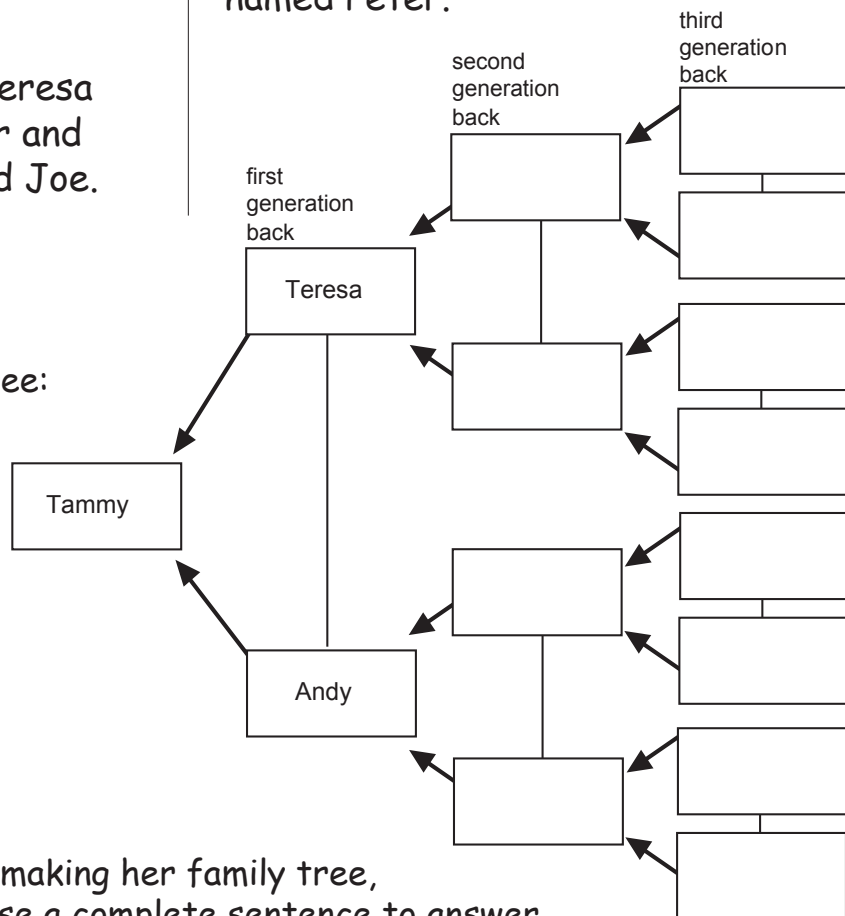
⁶Tammy's parents are Teresa and Andy. ⁷Teresa's mother and father are called Emma and Joe.

⁸Joe's parents were called Mary and Tom. ⁹Emma's mother and father were called Sofía and Antonio. ¹⁰They died when Tammy was a little girl.

¹¹Andy's parents are Angela and Camilo. ¹²Angela's mother was named Ana. ¹³Angela's father is still alive and they call him Great Grampa Mario. ¹⁴Camilo's mother was Elena, and Camilo's father was named Peter.

Questions

1. Finish Tammy's family tree:



2. Did Tammy get any help making her family tree, and if so, from whom? Use a complete sentence to answer.

Write the numbers of the two sentences that give the best evidence for the answer. _____, _____

3. How many generations, not counting Tammy 's generation, are shown on the family tree? _____
4. Who died when Tammy was a little girl? _____

Write the numbers of the two sentences that give the best evidence for the answer. _____, _____

5. Which of Tammy's great-grandparents do you know for sure is still living?

Write the number of the sentence that gives the best evidence for the answer. _____

6. Who were Teresa's grandparents on her father's side?

7. Who is Ana's and Mario's grandchild? _____

8. Continue to fill out the chart below.

	1 generation back	2 generations back	3 generations back	4 generations back	5 generations back
Tammy	Tammy's Parents	Tammy's Grandparents	Tammy's Great Grandparents	etc.	etc.
1	2	4	_____	_____	_____

Describe the pattern, using a complete sentence.

9. Tammy found one picture of each of the people in the chart above, starting with herself and going back five generations. How many pictures did she find? _____ Show your work.