# Location - Cafeteria Camaraderie

Solution: the only arrangement that meets all the criteria would be the one below. Starting with Hector, the first letters of each name spell out H-I-G-H-S-C-H-O-O-L. Which is the solution and also the theme for this puzzle set.
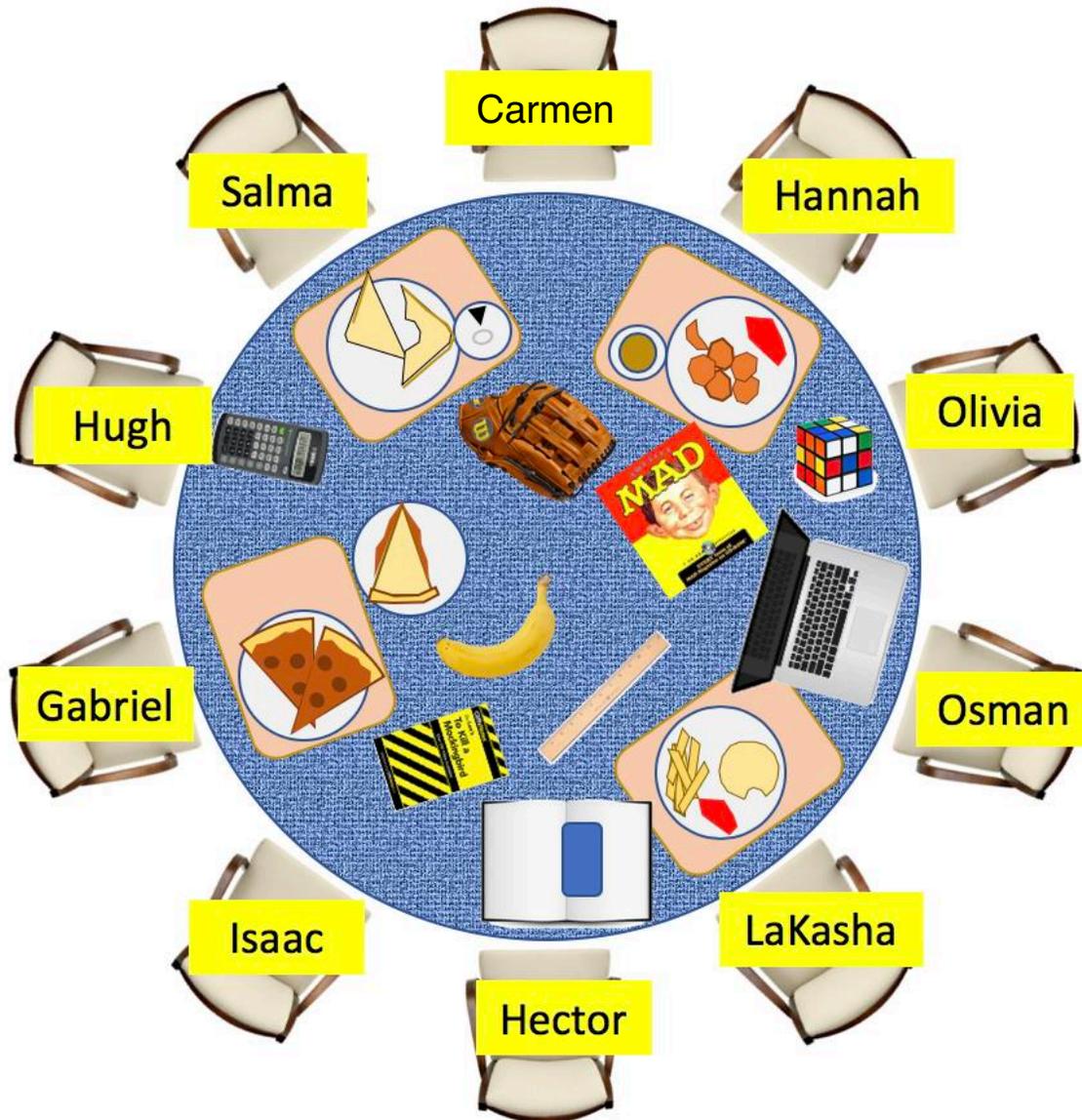
ART CLASS

So, you've heard of paint-by-numbers? This is more like sketch-by-letters. First, identify these seven artists by their portraits – and work samples; then use the letters from their names to draw a portrait of your own. Think Battleships game grid (B7, C7…) as to where to place these letters. Think **flag ship** as to what shapes to draw in those squares to represent those letters.

KILROY
WAS HERE

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
A
B
C
D
E
F
G
H
I
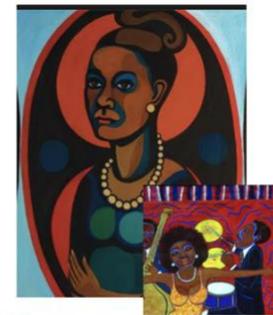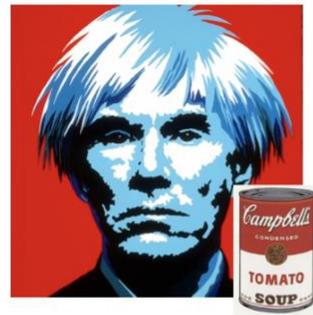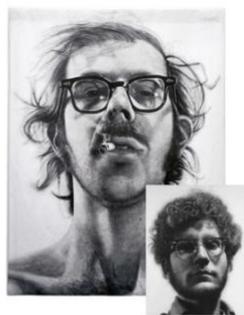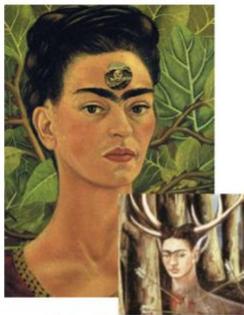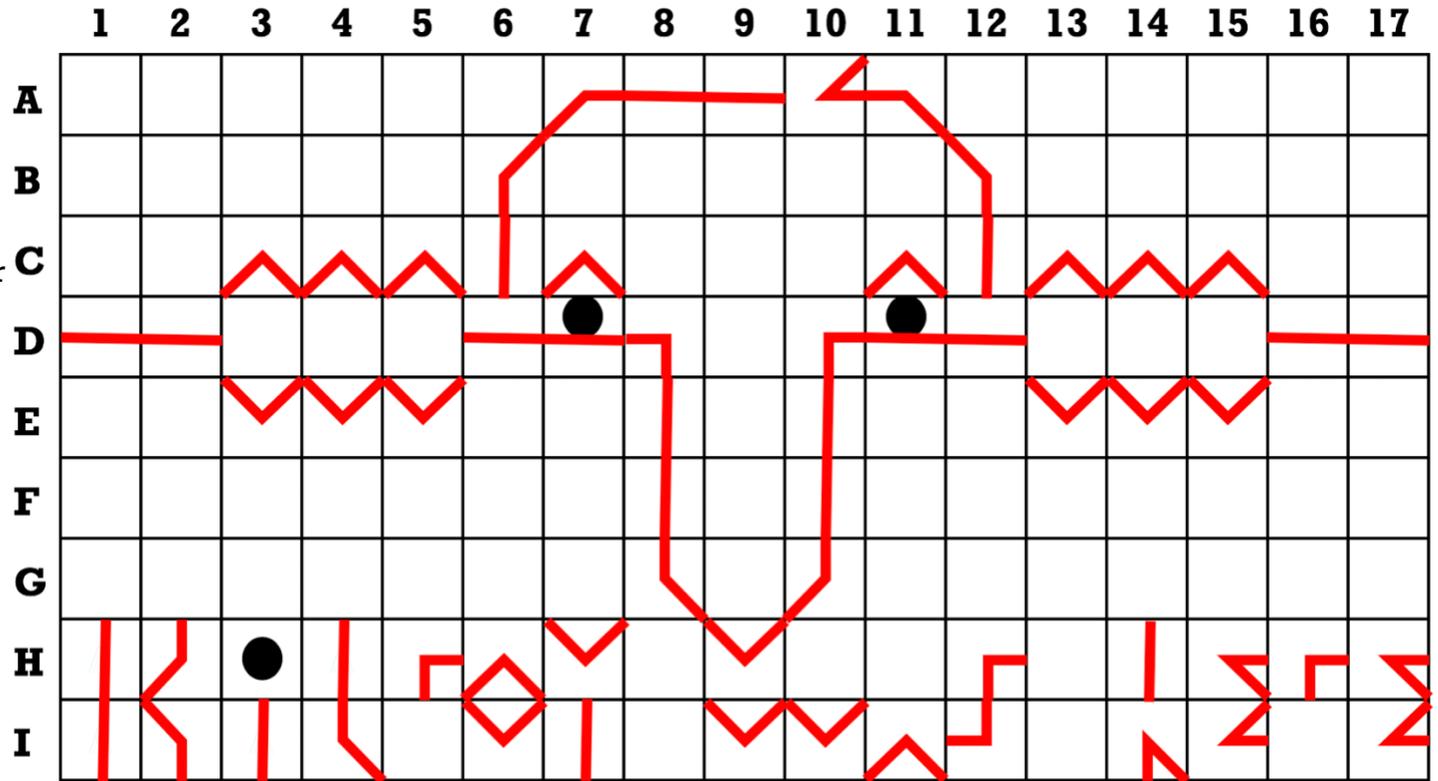
PABLO
PICASSO
$ ◇ * *

FRIDA
KAHLO
□ ☆ ♡

CHUCK
CLOSE
◇ ♀ ◇ @ ✶ %

SALVADOR
DALI
* & ♡ ☆ ♡

ANDY
WARHOL
△ ♡ ☆ ⬠ ☆ △ + +

FAITH
RINGGOLD
□ ♡

FRANZ
MARC
□ ☆ △ # ! ☆ ◇

ENGLISH CLASS

Solution: The second clue instructs solvers to use only the six-lettered words, of which there are 24 – four in each of the six clues. The third clue instructs solvers to group them into the parts of speech. Each clue has one adverb, one adjective, one verb and one noun that are six-letters in length. These should be sorted **in order of appearance** into the four separate grids – which goes in which is not important.

Clues one, four and five all refer to something sloping diagonally downward from upper left to lower right. The four diagonals along with the big ampersand, when placed in a logical order, read AUTHOR OF EATS SHOOTS & LEAVES. The author of the famous grammar book, Eats Shoots & Leaves is the puzzle solution: **Lynne Truss.** The cover of this book, by the way, shows the two pandas mentioned in the sixth clue.

O	B	J	E	C	T
E	F	F	O	R	T
S	P	E	E	C	H
S	T	R	A	I	T
S	A	L	U	T	E
P	A	N	D	A	S

L	I	N	E	A	R
S	E	L	E	C	T
B	R	A	I	N	Y
U	N	E	V	E	N
A	N	G	L	E	D
P	I	L	O	U	S

&

A	L	M	O	S	T
B	U	S	I	L	Y
C	U	T	E	L	Y
H	I	G	H	L	Y
S	E	L	D	O	M
R	A	T	H	E	R

S	L	O	P	E	S
C	H	O	O	S	E
G	R	O	U	P	S
C	A	N	O	E	S
S	L	A	N	T	S
S	T	R	E	S	S

The Runaway #1 British Bestseller

Eats, Shoots

& Leaves

The Zero Tolerance
Approach to Punctuation

!

LYNNE TRUSS
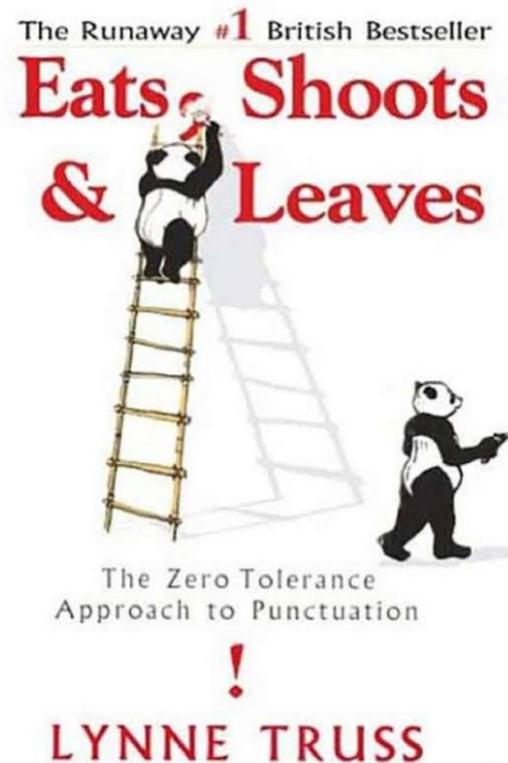
MATH CLASS

Solution: The puzzle involves placing the digits 1-5 into the blanks of each set to make mathematically correct statements. The solutions are shown below. Then lines are drawn to "combine like terms" so in every paired set a line is drawn from the 1 to the 1, from the 2 to the 2, and so forth. (Wherever multiple combinations are possible, multiple numbers are placed in the spaces, and alternative lines are shown in red. Solvers would only need to come up with one solution for each set. Note that these alternative lines do not have any impact on the solution.)

If all the letters that do not get crossed out (cancelled) are read left to right, you get: "NUMBER CANCELEDLETTERS. READONLY PRIMES." That is, if the other letters (the ones crossed out) are numbered left to right 1, 2, 3…. Then using prime numbers: the 2nd, 3rd, 5th, 7th, 11th, 13th, 17th, 19th, 23rd, 29th, 31st and 39st of those. Theses spell out the solution: "**PERMUTATIONS**." Also, just for fun, the remaining (nonprime) canceled letters spell out: "SORRY THESE ARE NOT THE PRIMES!"

$$5 / 1 - 4 / 2 = 3$$

U N P₂ B E₃ S₁ M E R₅ C R₆ O₄ R M₇

$$4 + \frac{3}{5} + \frac{3}{5} = 1\,2$$

$$5\,2 / 1\,3 = 4$$

A C E U₁₁ D N Y₉ T₁₃ R₈ T₁₀ L H₁₂ E₁₄ E

$$4 \times 2 + 5 = 1\,3$$

$$2 \times 3 / 4 = 1.5$$

E T L T S₁₅ E E₁₆ A₁₈ T₁₉ E₂₁ A₁₇ S R R₂₀

$$\left(\frac{4}{2} \,\hat{}\, \frac{2}{4} - 1\right)/3 = 5$$

$$\sqrt{1\,5 + 3 - 2} = 4$$

N₂₂ E T₂₆ O N O₂₄ E₂₈ I₂₃ R T₂₅ D L A H₂₇ O₂₉

$$\sqrt[3]{1\,2\,5} - \sqrt{4} = 3$$

$$(3! + 4 \wedge 1) / 2 = 5$$

N₃₁ R I₃₃ M S Y R₃₂ I S₃₆ P₃₀ P M₃₄ E₃₅ E S₃₇

$$4! / (1\,5 - 3) = 2$$
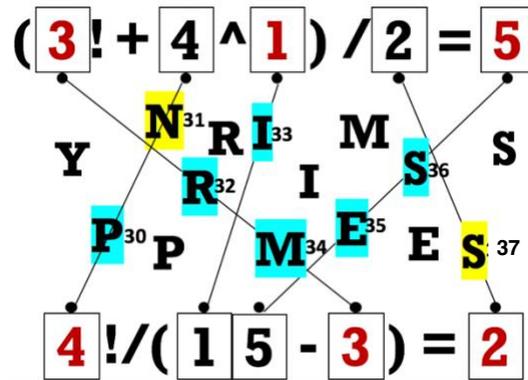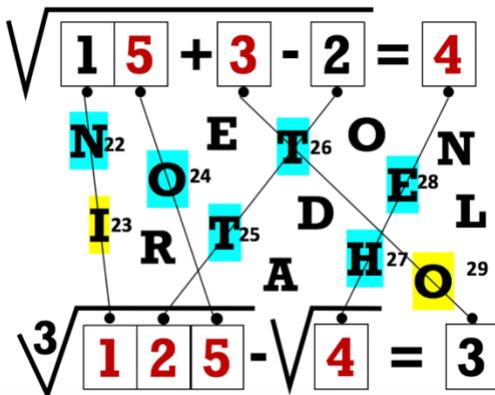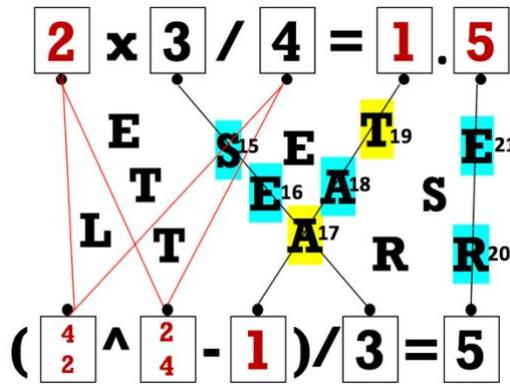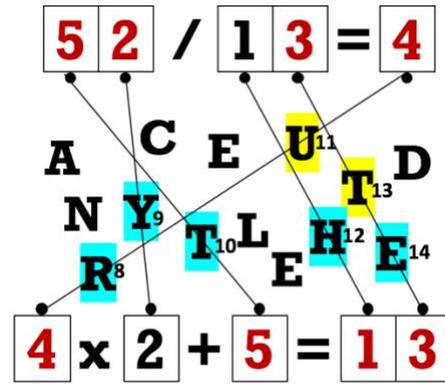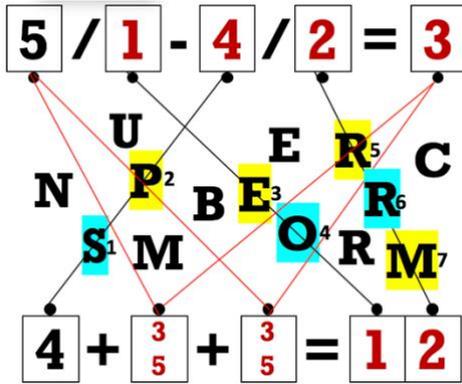
CHEMISTRY CLASS

SOLUTION:

1st clue = Ever since the Hindenberg disaster blimps have been filled with this gas (rule = vowels omitted) → helium, He → apply rule → **H**

2nd clue = Computer chips rely on this semiconducting metalloid (rule = drop last letter of each word) → silicon, Si → apply rule→ **S**

3rd clue = In bridges hemoglobin and the earth's core (rule = insert a U before each E) → iron, Fe → apply rule → **FUE**

4th clue = Cheap metal filling inside post-'82 US pennies (rule = backwards) → zinc, Zn → apply rule → **NZ**

5th clue = Heavy metal once used in paints and gasoline (rule = replace first letter with a D) → lead, Pb →apply rule → **DB**

6th clue = Filament for incandescent light bulbs (rule = upside down) → tungsten, W → apply rule → **M**

7th clue = Previous IUPAC name for nihonium (rule = substitute J's for U's) →ununtrium, Uut → apply rule → **JJT**

Placing these thirteen letters in designated order gives the eighth (Meta) clue: **ENJUSJTMFHBDZ**

8th clue = Dmitri's Legacy (rule = shift every letter forward one) → Mendelevium, Md → apply rule → **Ne**

The solution is **Ne** (which happens to be the symbol for another element, neon, which is "brilliant" in tubes and signs.

NOTE: "JC-Style". Refers to Julius Caesar Style - i.e. Caesar shift!

Solution: Plenty of hints that pig pen is the code of choice here. **Peg**gy, **Pen**ny, **pick** a **pen**, **complete mess, oinking &
stym**ied. The solution involves writing down the 4 solutions in pig pen. Then using the mirrors reflect those letters
to make the new letters that give the solution.

Here's what the grid looks like filled in with PigPen: This letter is the L in **LYNNE**.
If that letter were reflected in this diagonal mirror,
it would make this shape which is a P
and so, a P goes in
space 40 in
the grid below.

Likewise, this letter is the last S in TRUSS, and it would
reflect off this   mirror and produce this same shape,
which is obviously   another S, so an S goes in
space 38 in the grid.
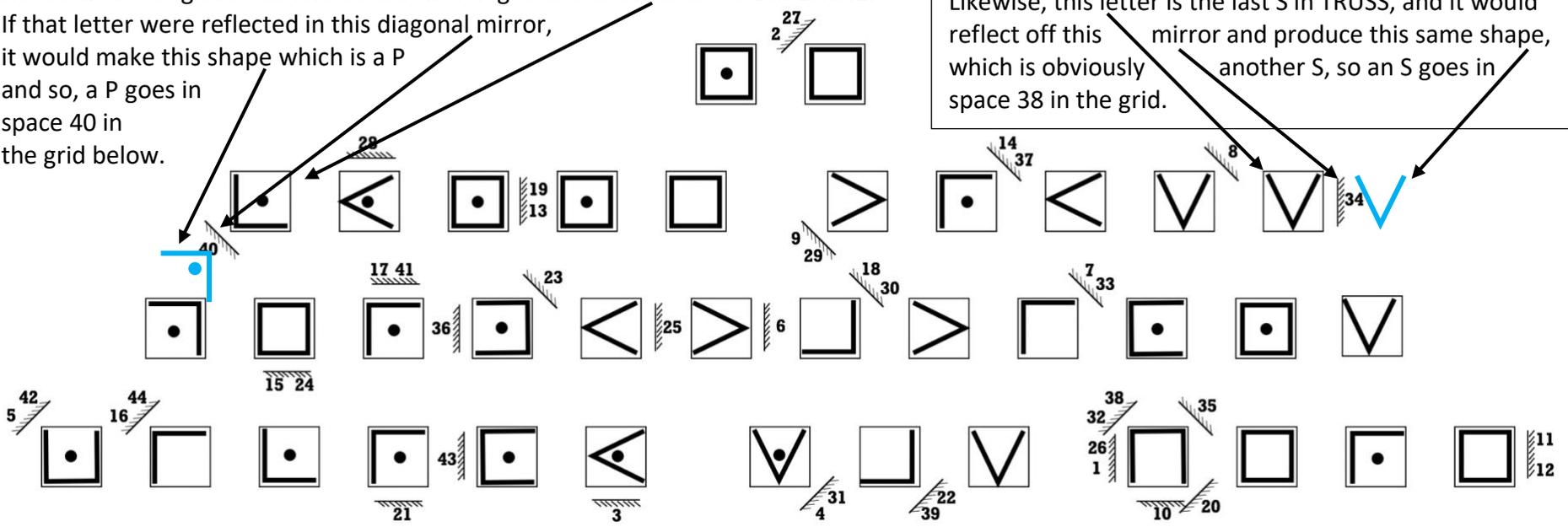
Note: to save time, most of the mirrors have two letters to speed up this process. 44 letters to fill may seem like a lot, but it goes pretty quickly.
When all the letters are filled in it gives the solution:

H	E	Y	Y	O	U	I	T	S	B	E	E	N	R	E	A	L	A	N	D	L	I
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22

K	E	T	H	E	Y	S	A	Y	D	I	S	F	O	R	D	I	P	L	O	M	A
23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44

**"HEY, YOU, IT'S BEEN REAL, AND LIKE THEY SAY: D IS FOR DIPLOMA."**

BONUS: CROSSROADS

Part I (the numbers): the trick here is to realize that the numbers on each dot tell you how many lines lead out of it to other dots. There are two types of "2's: normal and angular (ㄹ). The normal will have the lines come out in a linear fashion, the angular, will have the two lines come out at right angles. There is (I believe) only one solution to fill in all the lines. (below left.).

Part II: Then you start seeing words that intersect (overlap). The rule uncovered here is that they overlap by just one letter at a time. That is, anytime two different words intersect it is just at one letter, not more. (below right). These words could possibly be discovered without using the twelve clues.

angle bisector for example = CONSTRUCTION. Given for bad behavior = DEMERIT Times itself equals -1 = I. Characteristic of a good educator = INNOVATIVE. Joey dyed his hair green... = NOTICE Training when you are not competing = OFFSEASON   Descendant of the Ditto = PHOTOCOPIER   I before E... = ROTE. Known for his demise = SALESMAN. Time increment... = TIC. Since prom, you and me both = US. Diffused matter = VAPOR.

O	C	O	I	T	A
T	R	P	V	E	V
O	O	I	N	N	O
H	T	E	R	O	I
P	I	M	E	D	T
O	R	E	U	U	C
P	L	A	S	R	N
A	E	C	I	T	O
V	S	I	T	S	C
A	M	A	E	N	O
N	O	S	S	F	F

O	C	O	I	T	A
T	R	P	V	E	V
O	O	I	N	N	O
H	T	E	R	O	I
P	I	M	E	D	T
O	R	E	U	U	C
P	L	A	S	R	N
A	E	C	I	T	O
V	S	I	T	S	C
A	M	A	E	N	O
N	O	S	S	F	F

These words are listed in alphabetical order. They also each have a unique word length 1-12. Since there are lots of possible I's, the correct "I" was given from the start, so that the overlapping single letters, in order spell out the solution: **INTERSECTION**