## Octahedron

IT'S BEEN A WHILE SINCE WE'VE HAD A COMPLICATED DIAGRAM to challenge your spatial skills (and mine!). My test solvers tell me this puzzle is difficult, so be warned. The box below contains hints for placing several letters. The daredevils among you will want to try solving without the hints. Let me know if you do.

The letters from each of the nine-letter words will be inserted into the small triangles on one of the faces of the octahedron. Small triangles that are adjacent share a letter if they are from different faces (for example, triangle \#2 on the front and the right face). Adjacent triangles on the same face generally do not share a letter (but may).

A medium-size triangle can be formed from four of the small triangles (for example, 1-2-8-9, 2-3-4-5, and 5-6-7-8 on the front face). There are three medium-size triangles on each face of the octahedron. They are clued below and will be inserted into the diagram in an order to be determined by the solver.

Both the nine-letter words and the four-letter words are scrambled; that is, the four-letter word occupying triangles 1-2-$8-9$ need not be read $1-2-8-9$ but may be $9-8-2-1$ or any other order. (I think if the four letters are different, there are 24 different ways, but I'll leave the hard mathematical puzzles to someone else.)

Ultimately, three letters on a face will be shared by three other faces, three will be shared by one other face, and three will not be shared. The six letters at the vertices of the octahedron are different from one another and, in order (triangles $1-3-7-13-19-27$ ), spell a word contained in a famous quotation about a genre of theater from the playwright George S. Kaufman. The twelve letters shared by two large triangles along the edges are also different from one another and can be reordered to spell a word contained in a well-known quotation from Hamlet (which is a word that could also be said to be related to the Kaufman quote). A word that doesn't repeat any of its letters is known as an isogram, which I was happy to learn through constructing this puzzle.

There are two proper nouns, one among the nine-letter words and one among the four-letter words. Ignore punctuation, which is designed to confuse

Thanks to Eric Klis and Bob Fink for test-solving and editorial suggestions.

## Nine-letter words

$\square$ FRONT: The first person to be toaster ordered Italian liqueurs
■ LEFT TOP: Promoting and singing "Oh! Susanna"?

- RIGHT TOP: Ripe farts let loose in hazardous buildings
$\square$ BACK TOP: Rid briefs promiscuously in pony cars
$\square$ BOTTOM: Forbidden at the end of the night and day to be counted
■ BOTTOM LEFT: Cheerful bulletin interpreted after Easter
■ BOTTOM RIGHT: Pale tuber oddly shaped but well-regarded
- BOTTOM BACK: Cruelties unleashed with sets of knives


## Four-letter words

$\square$ Stringed instrument is something like a recorder but less loud

- Lately it's often big and evidently consolidatable
- If from the right, BS is BS
- Spoken lines cropped up
- Gossiping nobleman's slip
- Foremost, for the most part, they make cones
- Fabricates golf positions
- Desecrate a legendary homestead
- Television for you in Punta del Este to remain unaffected

■ Source of energy at the start of many Buddhist prayers

- Quietly consume a kind of fuel
- Peepers conceding resistance to puzzles
- Five bucks? Excellent penalty
- Telling one who adds color to be urgent
- Small hit-but inhaling not
- Signal the most beautiful girl at the ball with catcalls

■ Unable to decide to nurse

- Engrossed in troubled part

■ Sing like Merman outside Belfast

- Where one signs for reorganized lien
- A bit of needlework with a bit of wisdom, I'd say

■ Preserve ecru with a new design
■ Big horn blown at BU

- Stateless discord is plentiful

Six-letter isogram from George S. Kaufman quote:
$\overline{1} \overline{3} \overline{7} \overline{13} \overline{19} \overline{27}$
Twelve-letter isogram from Hamlet quotation:
(scrambled from 2, 5, 8, 11, 14, 17, 20, 23, 26, 28, 32, 36)
T OM T O C E is a senior manager for actuarial services with Ernst \& Young in New York and is a member of the Jeopardy! Hall of Fame.





## Solutions may be emailed to thomas.toce@ey.com. In order to make the solver list, your solutions must be received by Nov. 30, 2014.



## Previous Issue's Puzzles-Bobby D and Me and Double Trouble

The category was famous scientists. Most solvers got the ones I intended. But (Margaret) Mead can be made from "made," and interestingly, (Fritz) Haber is an anagram of Brahe, so line \#7 offered several choices. Someone found (Edward Murray) East in line \# 12.

## Post-Apocalyptic Global Warming Dirge

The least that we can do is make a list, ("least" = TESLA)
On tablets they'll unseal in eons hence, ("unseal in" = LINNAEUS)
Of all the facts that led men to dispense ("led men" = MENDEL)
With preludes and look inward for the gist. ("inward" = DARWIN)
Pure conics as a cause can't be dismissed. ("Pure conics" = COPERNICUS)
Some say the Nineties still hang in suspense.
("Nineties" = EINSTEIN)
A bar he played made no harmonic sense. ("bar he" = BRAHE)
I won ten bucks and then we all got pissed. ("won ten" = NEWTON)
We have a limit now: one elk per chef. ("elk per" = KEPLER)
As Marches die, we still must kill our meat. ("Marches die" = ARCHIMEDES)
If all this is a game, well, then, I'm ref. ("I'm ref" = FERMI)
If all one eats is herring, cod's a treat. ("herring cod's" = SCHRÖDINGER)
Messiah says, "I cure those who are deaf." ("I cure" = CURIE)
Why would a savior lie, maraud, or cheat? ("savior lie" = LAVOISIER)

## Solvers

The solver list was inadvertently omitted from the previous issue. Below are the solvers who solved Bobby D and Me; the names marked with an asterisk also solved Double Trouble from two issues ago. Then we present a list of those who solved only Double Trouble.

Bobby D and Me (and with an *, Double Trouble, too) Michael and Jina Accardo*, Dean Apps*, Damian Birnstihl, Mike Blakeney, Andy Boyer, Jan Brown, Lois Cappellano*, Sami Casanova, Jonathan Currier*, Todd Dashoff*, Francis De Regnaucourt, Mick* and Kris Diede, Sean Donohoe and Josh DenHartog*, Greg Dreher, Deb Edwards*, Bob Fink*, Phil Gollance*, Paul Haley, Rich Harder, Pete Hepokoski*, J\&\& J Holloman*, Ruth Johnson*, Feriz Kurtaljevic, Eric Klis*, Ken Kudrak, Jerry Lenis*, Tim Luker*, Jerry Miccolis, Lee Michelson*, Becky Moody*, Jim Muza*, Rich Newell, David Olsho, John Palmer, Joshua Parker*, David \&t Corinne Promislow*, Daniel Rhodes*, Jay Ripps*, Bill Scott*, Eric Savage, Andrew Shewan*, Doug Szper*, Dave Wallman*, Jim Wickwire, Frank Zaret*

## Double Trouble only

Mark Ackerman, Bob Camp, Bob Campbell, Patrick Donovan, Tim Fitzgibbons, Walter Haner, Jason Helbraun, Ruth Howald, Paul Kolell, Adrienne Lewis, Jon Michelson, Steve Ruiter, Sally Jane Smith, Jon Turnes

