

SCIENCE PUZZLERS, TWISTERS & TEASERS

Chemical Compounds

Is There a Speaker in the House?

- To be a good public speaker, you must state things clearly and simply. Unfortunately, when Congressman Hicks speaks, she just seems to ramble. Part of the reason may be her inability to choose the right words. Below is a speech Congressman Hicks is going to deliver in twenty minutes. Replace the underlined phrases with more concise terms from the chapter using the blanks provided.

My fellow Americans, thank you for coming to participate in this open forum town meeting. While we may not be able to solve all of our community's problems tonight, I would like to touch **(a.)** any compound that increases the number of hydroxide ions when dissolved in water with you on some key issues. I don't want to come across too strongly when speaking of these things or seem to throw out words filled with **(b.)** any compound that increases the number of hydrogen ions when dissolved in water, but any leader worth her **(c.)** ionic compound formed from the positive ion of a base and the negative ion of an acid would have to stand up and be heard as I have. Thank you.

- a.** _____ **b.** _____
c. _____

A Clean, Well Lighted Place

- Zach gets to prepare an entire dinner for his home economics class final. The foods in the class refrigerator are organized so that each food group has a shelf of its own. Unfortunately, some items have been placed on the wrong shelves. For each shelf below, circle the one item that does not belong. In the first space to the right of each shelf, identify the biochemical with which the food items on the shelf are usually identified. Use the second space to add each odd food item you circled to the shelf where it belongs.

	Biochemical	Food Item Added
a. beef, chicken, butter, beans	_____	_____
b. vegetable oil, apples, cheese, bacon	_____	_____
c. fish, oranges, bread, pasta	_____	_____

Chemical Compounds, continued

Until the Cows Come Home



3. Some terms from the chapter have gotten loose in the pasture, where they are trying to chemically combine themselves with other things around them. Separate them before the cows come home. Each example contains a word from the farm and two chapter terms. Write the terms in the correct blanks.

	From The Farm	1st Chapter Term	2nd Chapter Term
a. caocarctotsilieved	_____	_____	_____
b. hshyderopcaerbohpsn	_____	_____	_____
c. nfesucanleclitec pacostids	_____	_____	_____
d. sobragacarsenice cocmropounwds	_____	_____	_____

Isn't That Ionic?

4. After the spring dance, a number of elements remained bonded. Listed below are groups of bonded atoms. They are identifiable by the atomic symbols in parentheses. Below that are situations that describe characteristics of the bondings. Match each group with a description by writing its atomic symbols in the blank.

Nate (Na) + Claire (Cl) Hal (H) + Hazel (H) + Ophelia (O)

a. At the dance, their bond just seemed to crystallize. It remained very strong as if nothing but extreme heat could cause a melt-down. But their tight bond tended to make them inflexible as a couple. When hammered with stress they tended to shatter.

What type of bond do they have? _____

b. The attraction between these elements is weak, which allows them to remain fluid. Despite this, their attraction to each other is greater than their attraction to other compounds. Consequently, as a group they don't mix well with couples that have a similar bond.

What type of bond do they have? _____