

## ConceptTest on Chemical Nomenclature

*ConceptTest to test the concepts of chemical nomenclature:*

You discover a new chemical element which you decide to name towsonium (after your alma mater) and to give it the symbol Ts. After investigating its chemistry, you decide that the compound  $\text{Na}_2\text{TsO}_3$  should be named sodium towsonite. Based on this, what would be the chemical formula for towsonic acid?

1.  $\text{H}_2\text{TsO}_3$
2.  $\text{H}_2\text{Ts}$
3.  $\text{HTsO}_3$
4.  $\text{H}_2\text{TsO}_4$

*Correct Answer is #4.*

*Comment to Instructor: This isn't a question that can be answered by memorization! In order to determine the correct response, the student must understand the systematics of the nomenclature system, including the relationship between anion names ending in -ite and -ate and the relationship between the name of the anion and the name of the corresponding acid.*

*Students selecting #1, 2, or 3 probably did not stop to think about the ending -ic in the acid name.*

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