

## ***ConcepTest on Calculating Molar Mass from Formula***

***Question for determination of molecular weight and reinforce significant figures.***

Nicotine,  $C_{10}H_{14}N_2$ , is a powerful stimulant found in tobacco leaves. What is the molar mass of nicotine, to 4 significant figures?

1. 162 g/mol
2. 162.2 g/mol
3. 280.0 g/mol
4. 148.2 g/mol

***Correct Answer: 2. 162.2 g/mol***

*Comment to Instructor: choice 1 indicates they do not recognize 4 significant figures; choice 3 was obtained by multiplying the subscripts; choice 4 was calculated with 1 less nitrogen in the formula.*

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