

# Chemistry for Accelerated Students

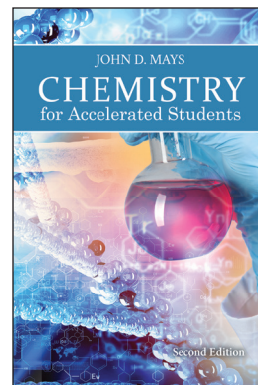
## Errata

*We always strive to make our textbooks as accurate as possible, but sadly, errors are a reality. We very much appreciate friends who report errata that are not included in this document!*

*Please send new errata to [info@novarescienceandmath.com](mailto:info@novarescienceandmath.com)*

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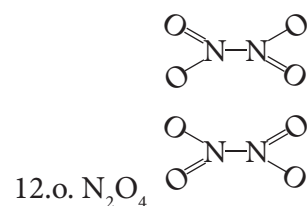


## Chemistry for Accelerated Students 2<sup>nd</sup> ed. (2018)

### Chapter 1 Exercises

28.c.  $2.91 \times 10^{22}$  atoms

### Chapter 3 Exercises



22.a. The Be—F bond is ionic

24. The molar mass of  $\text{CaCO}_3$  is 100.087 g/mol, giving a result of  $1.8051 \times 10^{24}$ .

### Chapter 4, Section 4.2.1

1. In the discussion of metals, three crystal structures should be mentioned, not just two. The close packing structures (depicted in the figures) are hexagonal close packing (hcp) and cubic close packing (ccp)—for which the unit cell is fcc. The third metallic structure is body-centered cubic (bcc). The most common structures are the close packing structures, hcp and ccp, but bcc also occurs.
2. In Figure 4.11 and 4.12, and in the paragraph discussing the figures, references to bcc are incorrect and should be hcp instead. Thus, the two structures depicted in Fig 4.11 are hcp on the left and ccp/fcc on the right. In Fig 4.12, the upper part is hcp and the lower part is ccp/fcc. Although bcc occurs in metals, it is not shown in any of the diagrams.
3. For clarity, note that the description of the ferrite and austenite structures of iron is correct as written—the two structures are bcc and ccp/fcc. However, the description is misleading because bcc is not actually shown in the figure, hcp is.

### Chapter 5 Exercises

13.i. reaction products should be  $\text{LiI(aq)}$  and  $\text{K(s)}$

## Chapter 7 Exercises

14.b.  $4.20 \times 10^2 \text{ kg}$

## Chapter 8 Exercises

40. The first answer is  $3.46 \text{ m}$

## Chapter 9

4.g. The answer is *diprotic*.

21. Add the following note to the answers given in the text: These answers all show the formation of carbonic acid,  $\text{H}_2\text{CO}_3$ . This acid is unstable and immediately breaks down to  $\text{CO}_2$  and water. Thus, each equation could be shown as:  $\dots + \text{CO}_2 + \text{H}_2\text{O}$ .

## Chapter 12 Exercises

6.f. The total number of water molecules shown on the right side of the final equation should be 2, not 1.

## Digital Resources

### Exam 1

6. Answer should be  $60.052 \text{ g/mol}$

### Fall Semester Exam

1.d. The compound shown on the exam should be  $\text{Cl}_2\text{O}$ . The answer given is for this compound.

4. Our given solution is correct except for the final result, which should be  $1.549 \times 10^{-19} \text{ J}$ .

9. The molecular mass of propane used in our solution is incorrect. It should be  $44.096 \text{ g/mol}$ , giving a result of  $8.194 \times 10^{25}$  carbon atoms.

20. Correct answer is  $\text{Mg} < \text{Ca} < \text{Sr}^{2+} < \text{Sr} < \text{Ba}^{2+}$

### Spring Semester Exam

6.b. The ionic equation should have  $2\text{Ag}^+(\text{aq})$  on both sides (not  $2\text{Ag}^{2+}(\text{aq})$ )