

ERRATA, for both the First and Second Printings. We thank Prof. Rob Scarrow of Haverford College for bringing these to our attention.

1. In Example 1.12(c) on page 25, Nd is in the *f* block, not the *d* block. In Example 1.12(d) the three Group 8 elements are Ru, Os, and Hs (but not Fe).
2. In the fifth line of text on page 31, the Group number should be 13, not 12.
3. In Exercise 1.61(d) on page 40, near the end the block should be the *d* block, not the *p* block.
4. In the second line of the Solution (a) in Example 2.2 on page 48, the  $pK_a$  should be less than 1, not less than -4.
5. In the problem statement for Example 2.10(b) on page 67, the pH should be 11.4, not 12.8.
6. In lines 8 and 9 of Paragraph 2 of Section 3.1A on page 88 after “peroxide ion”, change the wording to “a very strongly basic dianion which is completely protonated to give the hydroperoxide ion  $HO_2^-$ , which is a moderately basic anion with  $pK_{b2} = 3.38$ .”
7. In line 8 on page 113, after “twice as strong” add “except in the cases of nitrogen and oxygen”.
8. In line 10 of the first Overview paragraph on page 123, replace “ $\omega$ ” with “ $\pi$ ”.
9. In the caption for Figure 3.16 on page 123, change “Diphosphoric acid” to “Diphosphate(2-) ion”. Within the figure, the structures should be enclosed in brackets and “2-” added to the upper right of each bracketed structure to show the charge.
10. In line 4 of the Nitrido Anions Amplification on page 125, change “ $BN_3^{3-}$ ” to “ $BN_2^{3-}$ ”.
11. In parts 4 and 5 of the Solution in Example 3.15 on page 125, replace “antepenultimate” with “penultimate”.
12. In the first line of the second paragraph of text on page 126, change “*sp*-hybridizable” to *sp<sup>n</sup>*-hybridizable.
13. In the fourth line of the Solution to Example 3.16 on page 127, replace “antepenultimate” with “penultimate”.
14. In line 7 of the paragraph on Fluoro Anions on page 132, the  $pK_b$  values should be “either 13.5 or 18.9”, not “either 0.5 or -4.9”.
15. In line 2 of the Solution to Example 3.21 on page 136, the answer to the first calculation should be “-18.2”, not “18.2.”
16. At the beginning of the fourth line from the bottom of page 137, the inequality should be “ $y \geq x$ ”, not “ $x \geq y$ ”.
17. In the fourth through sixth lines of the first paragraph of the Amplification on page 140, replace “do not have three O-H groups, but have two O-H groups, one oxo group, and one P-H group instead” with “have one and two P-H groups, respectively.”
18. The parenthetical sentence at the end of the second paragraph of text on page 303 should read “(The oxidation potentials of half-reactions are simply -1 times the potentials of the corresponding reduction half-reactions.)” This changes the first four words of the sentence and replaces the word “oxidation” near the end of the sentence with the word “reduction”.
19. In the predominance diagram for N in Figure 6.7 in page 307, remove the orange hash mark at the left of the number “1.03”.
20. The top caption (a) of Figure 6.17 on page 323 should read “(a) Very electronegative nonmetals”, not (a) Very electronegative metals”—insert “non”.
21. At the end of line 3 of the third paragraph in Section 6.4B on page 341, change “3d” to “6s”.

22. In the second line of (a) in the Solution for Example 6.13 on page 341, change “P<sup>6+</sup>” to “S<sup>6+</sup>”.
23. The first line of Equation (6.19) on page 345 should not contain the factor (0.059/3) twice, so remove the second factor (0.059)/3 and the parentheses enclosing it.
24. In the fourth line from the bottom of the text (not the figure caption) on page 393, the right parenthesis for the CFSE is misplaced: it should be removed from after “2P” and instead inserted after “-0.4Δ<sub>o</sub>”.
25. In the sixth, ninth, and tenth lines of the paragraph headed “7.3C” at the top of page 400, replace “Table 7.4” with “Table 7.3”. (ie, three replacements)
26. In the first line of the paragraph of text on page 410, replace the final “<” with “>”. (This is between Cu and Zn.)
27. At the end of the Solution for Example 7.8 on page 410, replace the final “<” with “>”. (This is just before “Ga<sup>3+</sup>.”)
28. In the last line of Table 7.10 on page 424, the “0.845” should be “-0.845.”
29. In line 8 (second paragraph) of Step 1 on page 456, replace “0.714” with “0.732”.
30. At the end of the first line of Table 8.4 on page 460, replace “82-303” with “82-408”.
31. In the second paragraph, line 2 of “Physical Properties of Monomeric Molecular Oxides” on page 460, replace “Table 8.5” with “Table 8.4”.
32. In line 3 of the second paragraph on page 461, replace “-ia” with “-a or -ia”.
33. In the artwork for Figure 8.6d on page 464, an extra brown layer is mistakenly inserted beneath the top gray layer and the light brown layer. This extra layer should be removed.
34. In lines 5 and 6 of the third paragraph on page 469, replace the text after the semicolon with the following text: “there is an extra vacant tetrahedral hole about the large (approximately cubic close-packed) iodide ions.”
35. In line 2 of the third paragraph on page 481, replace “Figure 4.6” with “Figure 4.7”.
36. In Figure 8.22a (Kaolinite) on page 506, the brown and light brown colors should be switched.
37. In line 5 of the paragraph 8.7B on page 509, there is an error within the brackets, which should contain [Si<sub>x</sub>Al<sub>1-x</sub>O<sub>2</sub>], not [Si<sub>x</sub>Al<sub>2-x</sub>O<sub>2</sub>].
38. In the last chemical formula in Exercise 8.9 on page 516, there are two right brackets] when there should only be one—remove the internal right bracket before the Cl to leave “[Cr(NH<sub>2</sub>C<sub>8</sub>H<sub>17</sub>)<sub>3</sub>Cl<sub>3</sub>]”.
39. In Exercises 8.17 and 8.18 on page 517 the table references are incorrect: replace “Table 1.11” with “Table 1.13”.
40. In Exercise 8.18 on page 517, the first sentence should be rewritten to read “Compare the observed element-oxygen bond lengths for OsO<sub>4</sub> and XeO<sub>4</sub> (Figure 8.5) with the sums of covalent radii (Table 1.13).
41. In Equation (9.9) on page 531, the number “2” should be superscripted (-Ze<sup>2</sup>/r).
42. In line 6 of the next-to-last paragraph on page 532, the Table reference should be “(Table 9.1)” instead of “Table 1.2”.
43. At the end of line 8 of the first paragraph on page 580, the C<sub>3</sub><sup>3</sup> should be replaced by C<sub>2</sub><sup>2</sup>.
44. In the bottom half of Figure 10.2b on page 580, the parenthetical label for the σ<sub>v</sub>' mirror plane should be yz, not xz.
45. At the end of paragraph “I” on page 586, the sentence “An example of a molecule in the S<sub>2</sub> point group is H<sub>2</sub>O<sub>2</sub> (Figure 10.8)” should be changed to “An example of a molecule in the C<sub>2</sub> point group is H<sub>2</sub>O<sub>2</sub> (Figure 10.8)” and moved to the end of paragraph “J” on page 586.

46. The bracketed text in lines 2 and 4 of the caption for Figure 10.13 on page 602 misplaces (f); the bracketed text for line 2 should read “[(a), (c), and (e)]” and the bracketed text for line 4 should read “[(b), (d), and (f)]”.
47. On page 604 of the text, the lower line of figures should be under Exercise 10.6, not Exercise 10.7.
48. In the text of Exercise 10.5 on page 604 of the text, all of the numbers should be subscripted except the “2-”, which should be superscripted.
49. In Answer 6.73 on page A-16 of the text, for part (c), remove the words “N or”. Move the expression “assuming 0.5 V overvoltage” from the end of part (c) to the end of part (b). In part (b), delete “no I species(?)” and insert “ $\text{H}_5\text{IO}_6$ ,  $\text{H}_4\text{IO}_6^-$ , and  $\text{H}_3\text{IO}_6^{2-}$ ” near the end of part “b” before the expression “assuming 0.5 V overvoltage.”
50. In Answer 8.89 on page A-22 of the text, remove the “<sub>2</sub>” subscript after the “(Mg<sub>5</sub>Fe<sup>III</sup>)” at the beginning of the formula.
51. In Answer 10.5d on page A-25 of the text, replace the first “C<sub>2</sub>” with “S<sub>4</sub>”.