## Appendix B

### An Abbreviated Table of Isotopes

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<th>Half-Life (If Radioactive) $T_{1/2}$</th>
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### An Abbreviated Table of Isotopes

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<td>Dysprosium</td>
<td>Dy</td>
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<td>157,924,100</td>
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<td>Ho</td>
<td>164.930 32</td>
<td>159</td>
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<td>Thulium</td>
<td>Tm</td>
<td>168.934 21</td>
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<td>172</td>
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<td>73</td>
<td>Tantalum</td>
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<td>180.947 9</td>
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<td>Tungsten</td>
<td>W</td>
<td>183.84</td>
<td>175</td>
<td>174,940,768</td>
<td>97.41</td>
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<td>(Wolfram)</td>
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<td>177</td>
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<td>Rhenium</td>
<td>Re</td>
<td>186.207</td>
<td>178</td>
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<td>Os</td>
<td>190.23</td>
<td>179</td>
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<td>Iridium</td>
<td>Ir</td>
<td>192.217</td>
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<td>179,946,549</td>
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<td>195.078</td>
<td>181</td>
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<td>Gold</td>
<td>Au</td>
<td>196.966 55</td>
<td>182</td>
<td>181,948,206</td>
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<tr>
<td>80</td>
<td>Mercury</td>
<td>Hg</td>
<td>200.59</td>
<td>183</td>
<td>182,950,224</td>
<td>14.31</td>
<td>1024 yr</td>
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(Continued)
## APPENDIX B | An Abbreviated Table of Isotopes

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<th>Atomic Number</th>
<th>Element</th>
<th>Chemical Symbol</th>
<th>Mass (u)</th>
<th>Atomic Number</th>
<th>Mass (u)</th>
<th>Atomic Percent</th>
<th>Half-Life (If Radioactive)</th>
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<td>202.972</td>
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<td>70.476</td>
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<td>208*</td>
<td>207.982</td>
<td>3.053 min</td>
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<td>82</td>
<td>Lead</td>
<td>Pb</td>
<td>207.2</td>
<td>204*</td>
<td>203.973</td>
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<td>≥ 1.4 × 10^17 yr</td>
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<td>208.980</td>
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<td>209.984</td>
<td>22.3 yr</td>
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<td>Polonium</td>
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<td>210*</td>
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<td>164 μs</td>
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<td>85</td>
<td>Astatine</td>
<td>At</td>
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<td>218*</td>
<td>218.008</td>
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<td>86</td>
<td>Radon</td>
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<td>Francium</td>
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<td>228*</td>
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<td>Actinium</td>
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<td>Protactinium</td>
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<td>231.035</td>
<td>231*</td>
<td>231.035</td>
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<td>258*</td>
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<td>Neptunium</td>
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<td>94</td>
<td>Plutonium</td>
<td>Pu</td>
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<td>239*</td>
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<td>244*</td>
<td>244.064</td>
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