Strong on evolution, weak on facts

unprofessionalism

2+2=5

in Biology books

up for 2004 local Texas adoption

Glencoe, Holt, and Prentice have submitted three regular (non-AP) Biology books in Texas. They filed notarized affidavits that they edited them for accuracy. The state review panel "checked" them for errors. But *publishers poorly edited them*. The *review panel carelessly read them*. They missed **110 ERRORS OF FACT**, which publishers agreed to correct after seeing our lists.

"**prokaryote** organism whose cells lack a nucleus"
— Prentice Hall Biology (Prentice, 2004), p. 1100, col. 2

wrong definition
This definition says prokaryotes are multicellular, whereas in fact they are unicellular. The text itself admits this on p. 471, par. 3, lines 3-5.

"**acid precipitation**: rain, snow, sleet, or fog with a pH below 7 ...."
— Biology: Dynamics of Life (Glencoe, 2004), p. 1113, col. 1

wrong definition
All precipitation has a pH below 7. The cleanest rainwater picks up carbonic acid from dissolved carbon dioxide.

"Photosynthesis is the process by which plants use carbon dioxide and the energy from sunlight to make sugar and carbon dioxide."
— Holt Biology (Holt, 2004), p. 115, top right margin, "Answers to Before You Begin," no. 1, Teacher's Edition

wrong product
Photosynthesis produces sugar and oxygen, not sugar and carbon dioxide. The text itself admits this on p. 97, par. 3 — par. 4, line 6.

"The great majority of bacteria are unicellular."
— Biology: Dynamics of Life (Glencoe, 2004), p. 487, top left, "Figure 18.10," caption, lines 1-2

wrong description
All bacteria — not "the great majority of" them — are unicellular. The text itself admits this on p. 486, col. 2, par. 2, lines 1-2; and on p. 550, col. 1, bottom par., line 1.

"**obligate anaerobe** organism that does not require oxygen in order to live"
— Prentice Hall Biology (Prentice, 2004), p. 1098, col. 2

wrong definition
This is the definition of a facultative anaerobe, not of an obligate anaerobe. Obligate anaerobes cannot live in the presence of oxygen. The text itself admits this on p. 474, par. 5, lines 1-3 and par. 6, lines 1-2.

"With each successive half-life, the total amount of material decayed decreases."
— Holt Biology (Holt, 2004), p. 252, left margin, "Using the Figure," lines 11-13, Teacher's Edition

wrong concept
In radiometric dating, with each successive half-life, the *total amount* of decayed material does not decrease. It *increases*. The **additional** amount of decayed material decreases with each successive half-life.

Q: "Spinach is a long-day plant that grows best with a night length of 10 hours. Why is spinach not usually grown in the northern United States?"
— Prentice Hall Biology (Prentice, 2004), p. 652, no. 25

A: "The number of night hours in the northern United States is fewer than ten. The day length is too short for spinach to bloom."
— Prentice Hall Biology (Prentice, 2004), p. 652, left margin, no. 25, Teacher's Edition

wrong logic
If spinach is a long-day plant that grows best with 10-hour nights, and "the number of night hours ... is fewer than ten," the day length cannot be "too short for spinach to bloom."

Q: *"Which cell structure could serve as a storage location for water?"*
— Prentice Hall Biology (Prentice, 2004), p. 183, "Figure 7-13," caption, lines 5-7

A: *"The chloroplast"*
— Prentice Hall Biology (Prentice, 2004), p. 183, bottom right margin, "Answer to ... Figure 7-13," Teacher's Edition

wrong organelle
Vacuoles, not chloroplasts, store water. The text itself admits this on p. 179, par. 3, lines 2-4.

"**Identify** how changes in DNA cause mutations."
— Holt Biology (Holt, 2004), p. 189, "Quick Review," no. 4

wrong concept
Changes in DNA do not *cause* mutations. They *are* mutations. The text itself admits this on p. 8, par. 3, lines 1-2; and on p. 1094, col. 3, "**mutation**."

"... most plant life cycles include an alternation of generations."
— Biology: Dynamics of Life (Glencoe, 2004), p. 633, par. 1, lines 1-2

wrong description
All — not most — plant life cycles include alternation of generations. The text itself admits this on p. 562, col. 2, par. 4, lines 1-3; on p. 562, "Figure 21.5," caption; on p. 577, par. 2, lines 1-2; on p. 581, bottom par., lines 1-2; and on p. 1114, col. 1, "**alternation of generations**."

"During mitosis, metaphase is the stage that distributes identical chromosomes to what will become two new cells."
— Biology: Dynamics of Life (Glencoe, 2004), p. 279, right margin, no. 30, lines 1-5, Teacher's Edition

wrong stage
This stage in mitosis is anaphase, not metaphase.

Through our Lord and Savior Jesus Christ we find these errors, for better textbooks.

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