

Assignment 3

Due date: _____

Ch. 5.1, "Newton, Einstein, & Gravity,"
pp. 78-86.

How/know? 14.1: "Proof", p. 320

How/know? 14.2: "Checks on Fraud in Science", p. 327

How/know? 19.2: "Courteous Skeptics", p. 438

How/know? 18.2: "A System of Knowledge" p. 400

Q. 1,3-5,9; P. 1,2; D. momentum, mass, acceleration,
inverse square law

list significant points

list significant points

list significant points

list significant points + optional personal response

TEST 1 Date: _____

Assignment 4

Due date: _____

Sagan article: "Why We Need to
Understand Science" (handout)

How/know? 1.1: "The Scientific Method...", p. 3

How/know? 1.2: "Sci Arguments", p. 8

How/know? 2.1: "Scientific Models", p. 18

How/know? 2.2: "Pseudoscience", p. 27

How/Know? 5.2 "Cause & Effect", p. 85

Question sheet (download)

list significant points

list significant points

list significant points

list significant points + optional personal response

list significant points

Foundational Assignment

Due date: _____

Introductory Course Note Set

Question sheets (download from Course Downloads page, if not handed out.)

Assignment 5

Due date: _____

Ch. 1, "The Scale of the Cosmos", pp. 1-9

Ch. 19.2, "A Survey of the Solar System",
pp. 419-426

Ch. 19.1, "Origin of Solar System," pp. 416-426,

Ch. 19.3, "Story of Planet Building," pp. 426-434

Q. 3,7; P. 1,2,5,6 (solve for #sec); D. light-year

P. 4 (Show how you got # ½ lives, then give answer in years)

Q. 1,6,8; P. 5 (Book says to use Table, not Figure, 19.2);

D. condensation sequence, differentiation, planetesimal

Q. 13

Assignment 6N

Due date: _____

Ch. 25, "Meteorites, Asteroids, and Comets"
pp. 568-594

How/know? 25.1: "Selection Effects", p. 575

Ch. 3, "Cycles of the Moon", pp. 33-49

How/know? 17.1: "Statistical Evidence," p. 370

How/know? 22.2: "...Key to Past", p. 540

Q. 1-5,8; P. 12; D. selection effect, coma, Apollo-Amor objects
Trojan asteroids,

list significant points

Q. 2,6; P. 3; D. spring and neap tides

list significant points

list significant points

TEST 2 Date: _____

Assignment 7

Ch. 19.4, "Planets Orbiting...Stars", pp. 434-440
Ch. 20, "Earth", pp. 443-457
Ch. 26.1, "Nature of Life" and 26.2, "Origin of Life",
pp. 598-609
How/know? 19.1: "Evolution/Catastrophe", p. 451
How/know? 26.1: "Judging Evidence", p. 610

Due date: _____

Q. 14,16,20
Q. 2,5,11-13; P. 3; D. dynamo effect, albedo, Van Allen radiation belts
Q. 2,5-7,9; D. Cambrian period
list significant points
list significant points

Assignment 8

Ch. 21.1, "The Moon", pp. 460-473
How/know? 21.1: "How...Unify the Details", p. 466

Due date: _____

Q. 1,2,5,6,9; D. terminator, limb, regolith, tidal coupling
list significant points

Assignment 9N

Ch. 21.2, "Mercury", pp. 473-479
Ch. 22.1, "Venus", pp. 482-494

Due date: _____

Q. 10,12; D. lobate scarp
Q. 1,3,4; P. 1 (HINTS: distance = rate x time; radio waves are
low energy light waves so they travel at 300,000 km/s; ignore
orbital eccentricities—just use semi-major axes values.)
list significant points

TEST 3 Date: _____

Assignment 10

Ch. 22.2, "Mars", pp. 494-507
Ch. 23, "Jupiter and Saturn", pp. 510-540
How/know? 23.2: "Who Pays for Sci?", p. 534

Due date: _____

Q. 4-9
Q. 1 (Give 2 reasons.),4,5,7-9; D. Roche limit, tidal heating
list significant points

Assignment 11N

Ch. 24, "Uranus, Neptune, and Pluto", pp. 543-565

Due date: _____

Q. 4,7,8,11,12; D. occultation

TEST 4 Date: _____

Assignment 12

"Afterword", pp. 615, 616

Due date: _____

list significant points—hand in with Test 4 (but not tested upon)