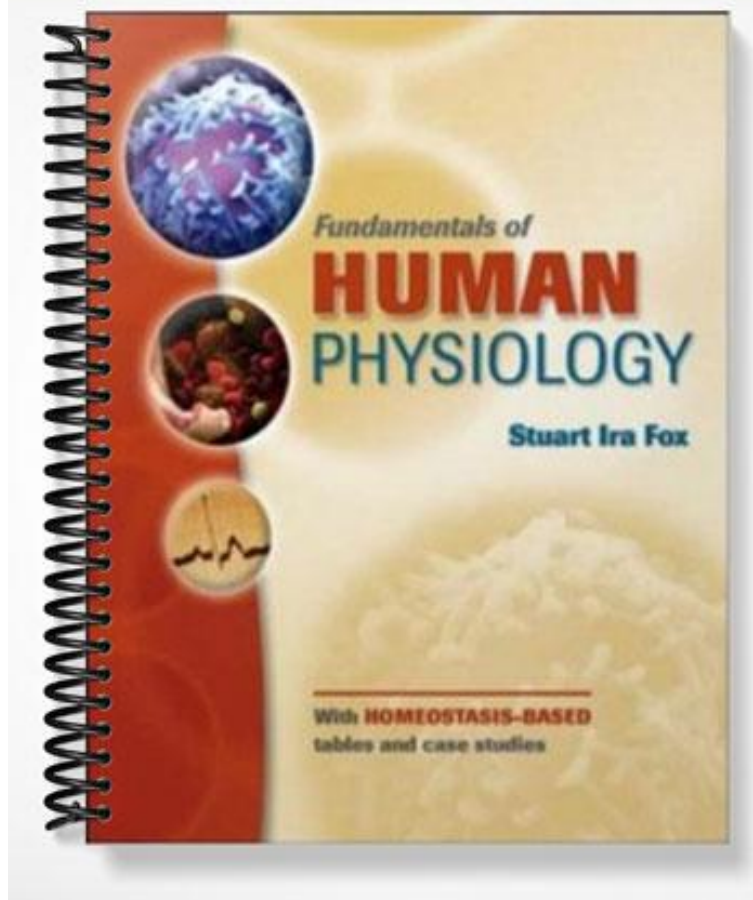


SOLUTIONS MANUAL



Answers to Chapter 2 of Fox's "Fundamentals of Human Physiology":

Answers to Compare/Contrast Statements:

Statement #1

Terms being described: extracellular compartment & intracellular compartment

[Text reference: pg.28]

Statement #2

Terms being described: cytoplasm & cytosol

[Text reference: pg. 29]

Statement #3

Terms being described: intracellular & extracellular

[Text reference: pg. 29]

Statement #4

Terms being described: microvilli & cilia

[Text reference: pg. 30/Figs. 2.3 & 2.4]

Statement #5

Terms being described: cilia & primary cilia

[Text reference: pg. 30/Fig. 2.4]

Statement #6

Terms being described: rough endoplasmic reticulum & smooth endoplasmic reticulum

[Text reference: pgs. 32-33/Fig. 2.7]

Statement #7

Terms being described: chromatin & chromosome

[Text reference: pg. 34/Fig. 2.9]

Statement #8

Terms being described: gene & genome

[Text reference: pg. 34]

Statement #9

Terms being described: genome & proteome

[Text reference: pgs. 34-35]

Statement #10

Terms being described: genetic transcription & DNA replication

[Text reference: pg. 35/Fig. 2.11]

Statement #11

Terms being described: codon & anticodon

[Text reference: pg. 36/Figs. 2.12 & 2.13]

Statement #12

Terms being described: mitosis & meiosis

[Text reference: pg. 39]

Statement #13

Terms being described: hyperplasia & hypertrophy

[Text reference: pg. 39]

Statement #14

Terms being described: necrosis & apoptosis

[Text reference: pg. 39]

Statement #15

Terms being described: metabolic pathway & cellular respiration

[Text reference: pg. 41]

Statement #16

Terms being described: first law of thermodynamics & second law of thermodynamics

[Text reference: pg. 41]

Statement #17

Terms being described: glycolysis & lactic acid fermentation

[Text reference: pgs. 44-45/Fig. 2.24]

Statement #18

Terms being described: differentiated cells & undifferentiated cells

[Text reference: pg. 49]

Statement #19

Terms being described: muscle tissue & nervous tissue

[Text reference: pg. 50]

Statement #20

Terms being described: exocrine & endocrine

[Text reference: pg. 52/Fig. 2.37]

Answers to Matching:

[Text reference: pg. 39/Fig. 2.16]

1. A
2. C
3. B
4. A
5. A
6. D
7. B
8. E
9. E
10. E

Answers to Matching:

[Text reference: pg. 47-48/Figs. 2.28-2.29]

11. B
12. B
13. A
14. A
15. C
16. D
17. A
18. A
19. A
20. C

Answers to Puzzle:**ACROSS:**

1. smooth [Text reference: pg. 50/Fig. 2.33]
3. organelles [Text reference: pg. 28/Fig. 2.1]
5. nucleus [Text reference: pg. 29/Fig. 2.1]
7. nuclear pores [Text reference: pg. 34/Fig. 2.10]
9. mitochondria [Text reference: pg. 32/Fig. 2.6]
11. Krebs [Text reference: pg. 46/Fig. 2.26]
13. cyanide [Text reference: pg. 46]
15. Fluid Mosaic Model [Text reference: pg. 29/Fig. 2.2]
17. divides [Text reference: pg. 36]
19. apoptosis [Text reference: pg. 31]
21. caspase [Text reference: pg. 39]
23. cisternae [Text reference: pg. 33/Fig. 2.8]
25. lysosomes [Text reference: pg. 31]
27. plasma membrane [Text reference: pg. 28]
29. totipotent [Text reference: pg. 35]
31. ATP [Text reference: pg. 42]
33. electron transport system [Text reference: pg. 46/Fig. 2.27]
35. red blood cells [Text reference: pg. 45]
37. RNA polymerase [Text reference: pg. 35]
39. sperm [Text reference: pg. 30]
41. liver [Text reference: pg. 47]
43. messenger RNA [Text reference: pg. 36]
45. differentiation [Text reference: pg. 35]
47. cristae [Text reference: pg. 32/Fig. 2.6]
49. connective [Text reference: pg. 53]
51. metabolism [Text reference: pg. 42]

DOWN:

1. skin [Text reference: pg. 54]
2. oxygen [Text reference: pg. 45]
4. Golgi apparatus [Text reference: pg. 33/Fig. 2.8]
6. enzyme [Text reference: pg. 42]
8. fatty acids [Text reference: pg. 48]
10. ribosomes [Text reference: pg. 32]
12. branch points [Text reference: pg. 42/Fig. 2.21]

- 14. autophagy [Text reference: pg. 31]
- 16. epithelial tissue [Text reference: pg. 51/Figs. 2.35 & 2.36]
- 18. cytoskeleton [Text reference: pg. 30/Fig. 2.5]
- 20. nuclear envelope [Text reference: pg. 34/Fig. 2.10]
- 22. photosynthesis [Text reference: pg. 41/Fig. 2.17]
- 24. semiconservative [Text reference: pg. 38/Fig. 2.14]
- 26. systems [Text reference: pg. 55]
- 28. organ [Text reference: pg. 54]
- 30. transfer [Text reference: pg. 36]
- 32. bone [Text reference: pg. 53/Fig. 2.41]
- 34. blood [Text reference: pg. 54]
- 36. cell [Text reference: pg. 28/Fig. 2.1]