

Only Prof. Susskind's questions are included.

19. (2 pt) The abnormality shown in this picture is due to a defect in

- A. Apoptosis
- B. Cytoskeleton
- C. Lysosomes
- D. Mitosis



20. (2 pt) Which of these is NOT in DNA?

- A. Adenine
- B. Cytosine
- C. Guanine
- D. Thymine
- E. Uracil

21. (2 pt) Danny, the first child of Mr. and Mrs. Green, has cystic fibrosis, a recessive Mendelian disease. What is the risk that the Green's next biological child will have cystic fibrosis?

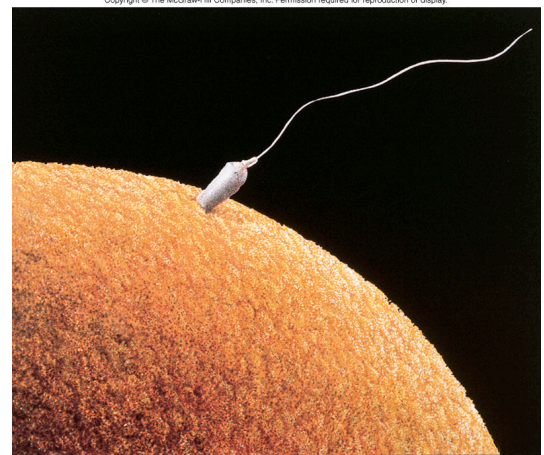
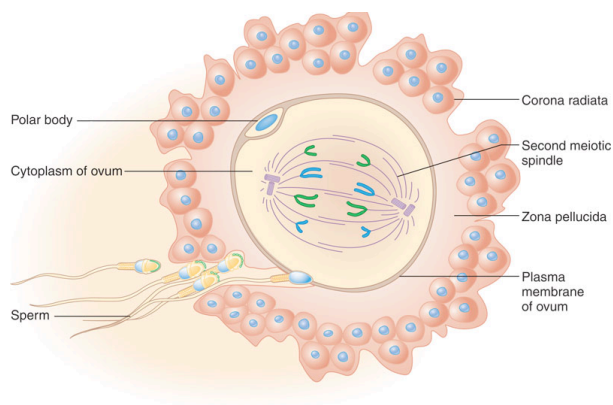
- A. 0
- B. 1/4
- C. 1/2
- D. 3/4
- E. 1

22. (1 pt) Primary oocytes are diploid, whereas secondary oocytes and mature eggs are haploid.

- A. True
- B. False

23. (2 pt) Mary has MGD, a mitochondrial genetic disease. If Mary has children, which prediction is true? (Assume that Mary is the biological mother of the children.)

- A. None of Mary's children will have MGD.
- B. All of Mary's daughters will have MGD, but Mary's sons will not have MGD.
- C. All of Mary's sons will have MGD, but Mary's daughters will not have MGD.
- D. All of Mary's children will have MGD.



24. (2 pt) The figures above depict events that normally occur

- A. In the ovary
- B. In a uterine tube (Fallopian tube)
- C. In the uterus
- D. In the vagina

25. (2 pt) So far, the only disease that has been eradicated by vaccination is smallpox.

- A. True
- B. False