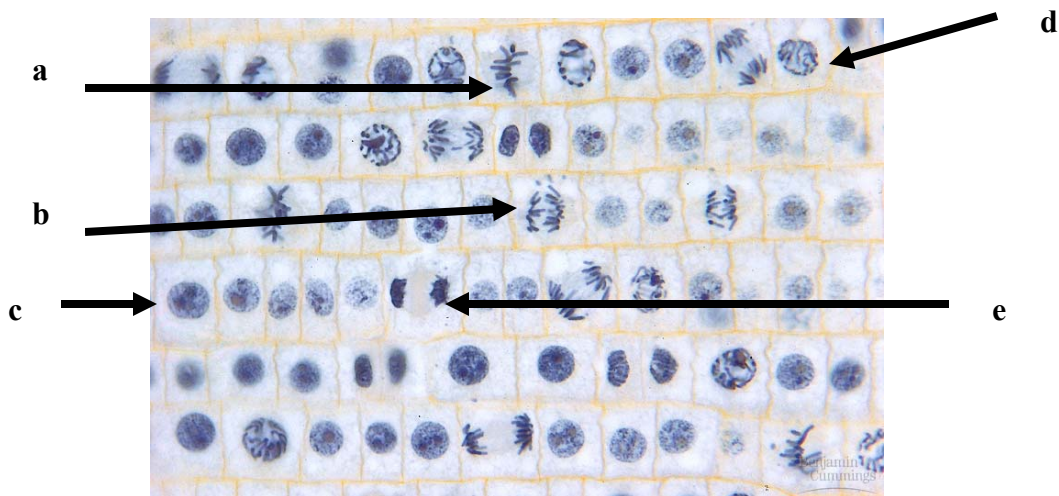


Biology 20

Mitosis & Meiosis Take Home Quiz #2

- When would the quantity of DNA double when growing cells?
a) before karyokinesis; b) after karyokinesis; c) after cytokinesis; d) during prophase.
- Which one of the following is a difference between sexual and asexual reproduction?
a) regeneration is exclusive to sexual reproduction;
b) sexual reproduction produced more offspring;
c) sexual reproduction includes the development of unfertilized eggs;
d) sexual reproduction is more likely to increase genetic variation than is asexual reproduction;
e) asexual reproduction always increase the number of sets of chromosomes in the offspring whereas sexual reproduction decreases the number of sets of chromosomes in the offspring.
- If the S-phase of interphase was eliminated from the cell cycle, the daughter cells at the end of mitosis would:
a) have half the genetic material as the parent cell; b) be genetically identical;
c) be genetically identical to the parent cell; d) none of these are correct choices.
- You're a researcher for a drug company. Which of the following candidate drugs would be worth developing as a cancer chemotherapy agent? A drug that:
a) causes cells to divide at a right angle from their usual orientation;
b) interferes with cellular respiration;
c) prevents sister chromatids from separating at anaphase;
d) prevents crossing over;
e) prevents tetrad formation.
- Which one of the following is not a function of mitosis? Mitosis helps organisms:
a) grow; b) regenerate lost parts; c) reproduce asexually; d) repair tissues; e) all of these.
- Using the following sentence: "Where is the dog?" Which one of the following variations of this sentence is most like a chromosomal deletion?
a) Where is the dog? b) Where is the the dog; c) Where is is is the dog?
d) Where is dog? e) Where is dog the? ab) what the heck...
- Asexual reproduction requires _____ individuals.
a) 1; b) 2; c) 3; d) 4; e) zero; ab) thousands.

Use the following diagram to answer questions 8 – 10:



- The phase in which enzymes copies the genetic material.
- The phase in which is the reverse of prophase.
- The phase just prior to sister chromatid separation.
- On the back of your scantron...Discuss how cell division has impacted you.