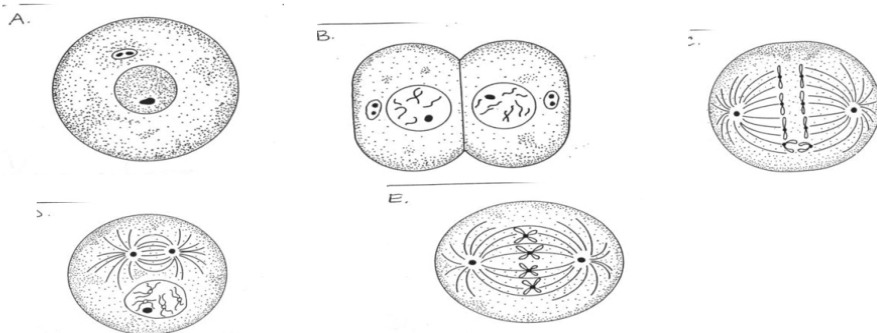


Worksheet Cell Division

1. Do somatic cells divide by mitosis or meiosis?
2. Ovulation is preceded by which form of division?
3. By which mode of division do sex cells divide?
4. New cells produced by mitosis
  - a) will vary in their genetic make up or b) will be identical to the original cell?
5. The cell cycle occurs in 3 stages in which stage is the DNA copied?
6. During which stage of mitosis does DNA condense and first become visible?
7. During which stage of mitosis do chromosomes line up at the metaphase plate?
8. When an organism needs to produce new cells that are exact copies, which form of division would it use?
9. When an organism needs to produce gametes which form of division would it use?
10. When an organism needs to reduce the number of chromosomes in the cell, which form of division would it use?
11. How many chromosomes will a cell have in prophase if it began with 10 chromosomes?
12. How many chromosomes each daughter cell have when it completes Mitosis if it began with 10 chromosomes?
13. Following Meiosis how many chromosomes will the 4 gametes have if the diploid number for the cell is 10 ?
14. If a cell has a diploid number of 10 what is its haploid number?
15. What are exact copies of the same chromosome called?
16. Copies of the same chromosome derived from different parents are known as ?
17. During which phase of mitosis do sister chromatids line up at the metaphase plate?
18. During which phase of mitosis do sister chromatids pull apart?
19. When a cleavage furrow or cell plate is visible what stage of the cell cycle is occurring?
20. Which form a cell plate; animal cells or plant cells? What is its purpose



21.