

## Cell Division and Genetics Self Quiz

1. Draw a cell with 2 pair of chromosomes in the Metaphase stage of Mitosis.
2. Explain the experiment with plant height performed by Gregor Mendel. What conclusions did he develop from his observations?
3. What type of asexual reproduction do prokaryotes undergo? How come a prokaryotic cell will not undergo mitosis but a eukaryotic cell will?
4. Contrast acquired and inherited traits. Provide an example of each.
5. Is cytokinesis considered a part of mitosis? Why or why not?

6. Develop a T chart to contrast Mitosis and Meiosis.
  
  
  
  
  
  
  
  
  
  
7. Develop a Punnett Square to determine the probability that offspring will have blue eyes (bb) if the mother has hazel eyes (Bb) and the father has blue eyes (bb).
  
  
  
  
  
  
  
  
  
  
8. Develop a Punnett Square to predict the ratio of offspring with Hitchhikers thumb (hh) to those without hitchhikers thumb (Hh or HH) if the mother is homozygous dominant for hitchhikers thumb (HH) and the father is homozygous recessive for hitchhikers thumb (hh).
  
  
  
  
  
  
  
  
  
  
9. Draw a cell with 3 pairs of chromosomes in Anaphase 1 of Meiosis.