Focus Questions
Chapter 8
Honors Biology

Chapter 8

- What is the key biological difference between asexual reproduction and sexual reproduction? (8.1)
- How do prokaryotes reproduce? Explain the process. (8.3)
- What is chromosomes made of? (8.4)
- What are the phases of the cell cycle and what happens in each phase? (8.5)
- What are the phases of cellular division (mitosis) and what happens in each phase? (8.6)
- How does cytokinesis differ between plant and animal cells? (8.7)
- What factors impact cell division and what do those factors cause? (8.8)
- How is the cell cycle controlled? (8.9)
- What are the two types of tumors and how are they different from each other? (8.10)
- How are diploid and haploid cells different from each other and what are examples of each type of cell? (8.13)
- Explain how the process of meiosis differs from the process of mitosis. (8.14-8.15)
- How are homologous chromosomes similar and different from each other? (8.17)
- How and when does crossing over happen? What benefit is there to crossing over? (8.18)
- What is the term for unequal division of chromosomes? What impacts can unequal division of chromosomes have on organisms? (8.19-8.22)
- How does changes to a particular chromosome impact an organism? (8.24)

Chapter 8 Vocabulary

anaphase
anchorage dependence
asexual reproduction
autosome
benign tumor
binary fission
cell cycle
cell plate
chromatin
chromosome
cleavage furrow
crossing over
cytokinesis
density-dependent inhibition
diploid cell
fertilization
gamete
haploid cell
homologous chromosomes
interphase
locus (plural, loci)
malignant tumor
meiosis
metaphase
metastasis
mitotic phase (M phase)
mitotic spindle
mitosis
nondisjunction
prophase
sex chromosome
sexual reproduction
sister chromatid
telophase
trisomy 21
tumor
zygote