

Chap 15: Chromosomal Basis of Heredity

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What is the chromosomal theory of inheritance?

How did Thomas Hunt Morgan's work involving fruit flies help us understand sex linked genes?

Know how the sex genes work in humans. (Gravy – how it works in other organisms, pg 290)

Be able to calculate probabilities in X linked genes.

What is X inactivation, why is it only in females?

Why are some genes said to be linked? What does this mean?

What is genetic recombination?

How far usually do genes need to be apart from each other to act as if they are on separate chromosomes?

Know how a gene map works.

Know the types of chromosomal mutations

Be able to read a karyotype (review of chap 14)

What is aneuploidy?

What is polyploidy? Which organisms usually show polyploidy?

Now that this finishes genetics, why are mitochondria and chloroplasts mentioned at the end of the chapter? What is special about these organelles?