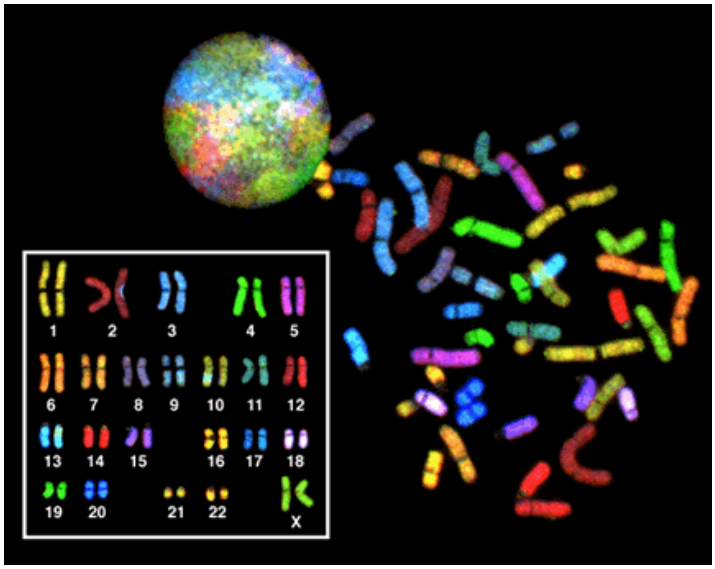
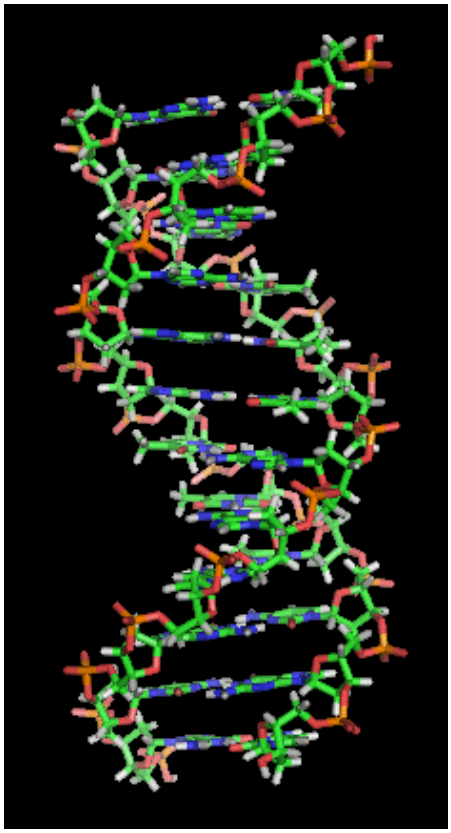
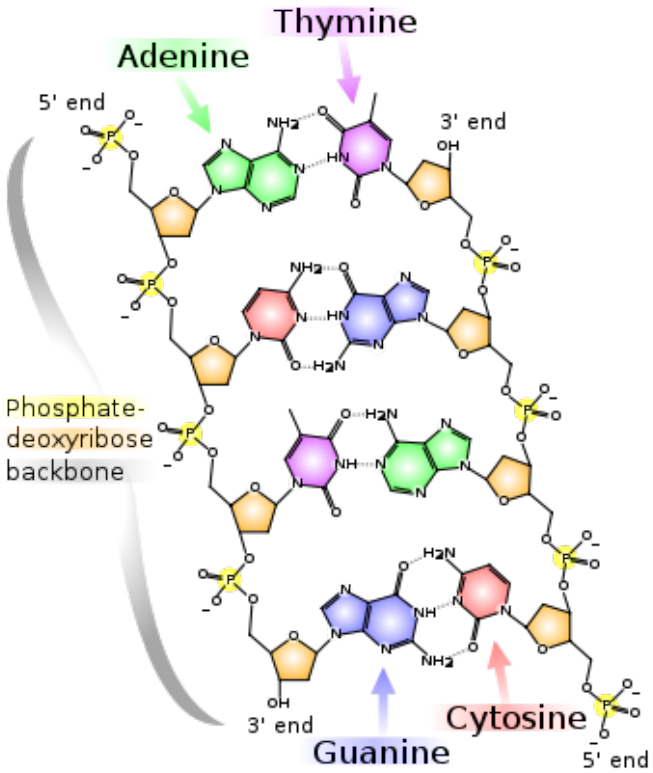
The Structure of DNA and encoding for proteins production - Transparency 11.1

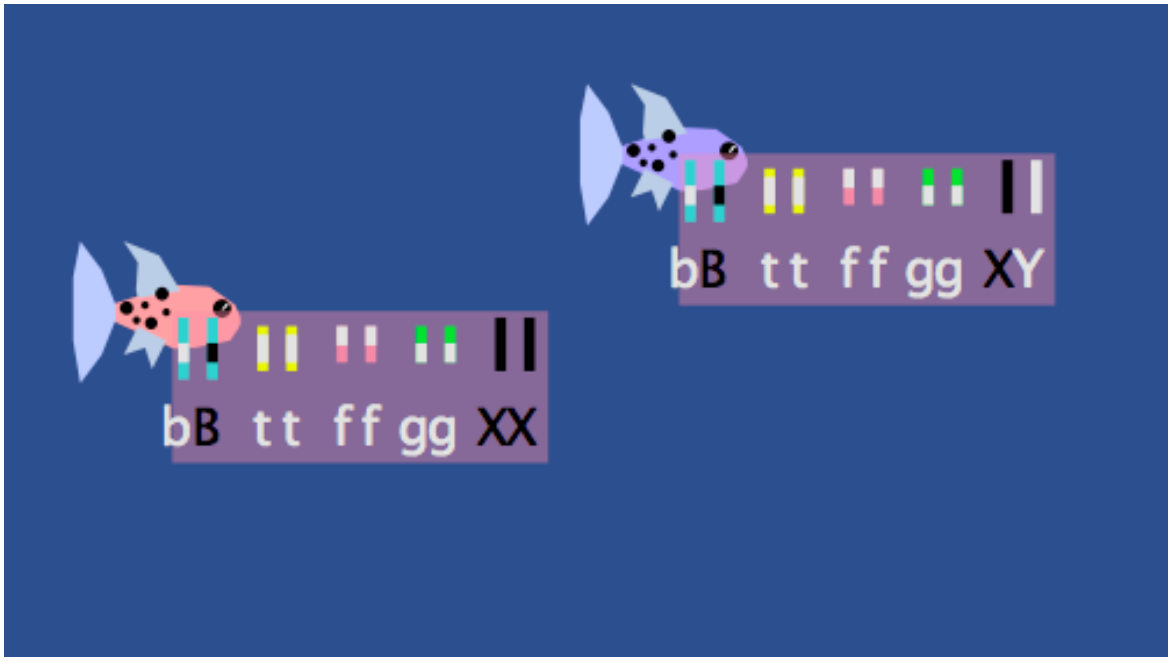


http://en.wikipedia.org/wiki/File:Sky_spectral_karyotype.png

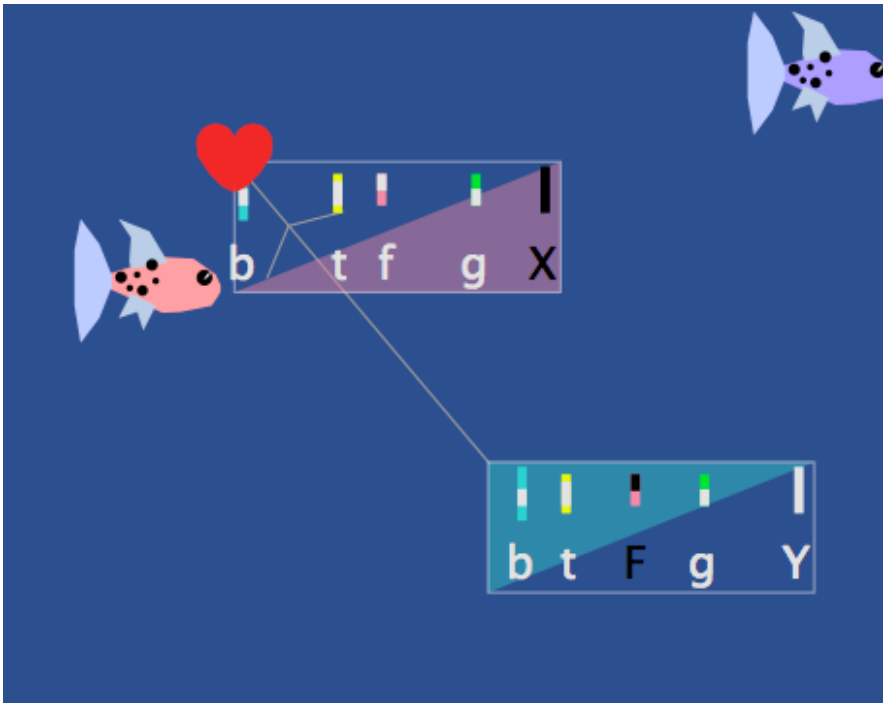




Karyotype of Somatic Cells in Fish from the Fish Tank Genetic Drift model

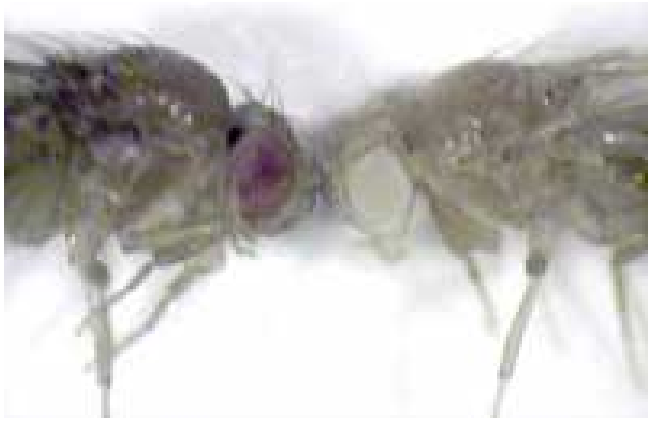


Karyotype of Gametes (Sex Cells) in Fish from the Fish Tank Genetic Drift model



Mutations and New Traits - Transparency 12.1

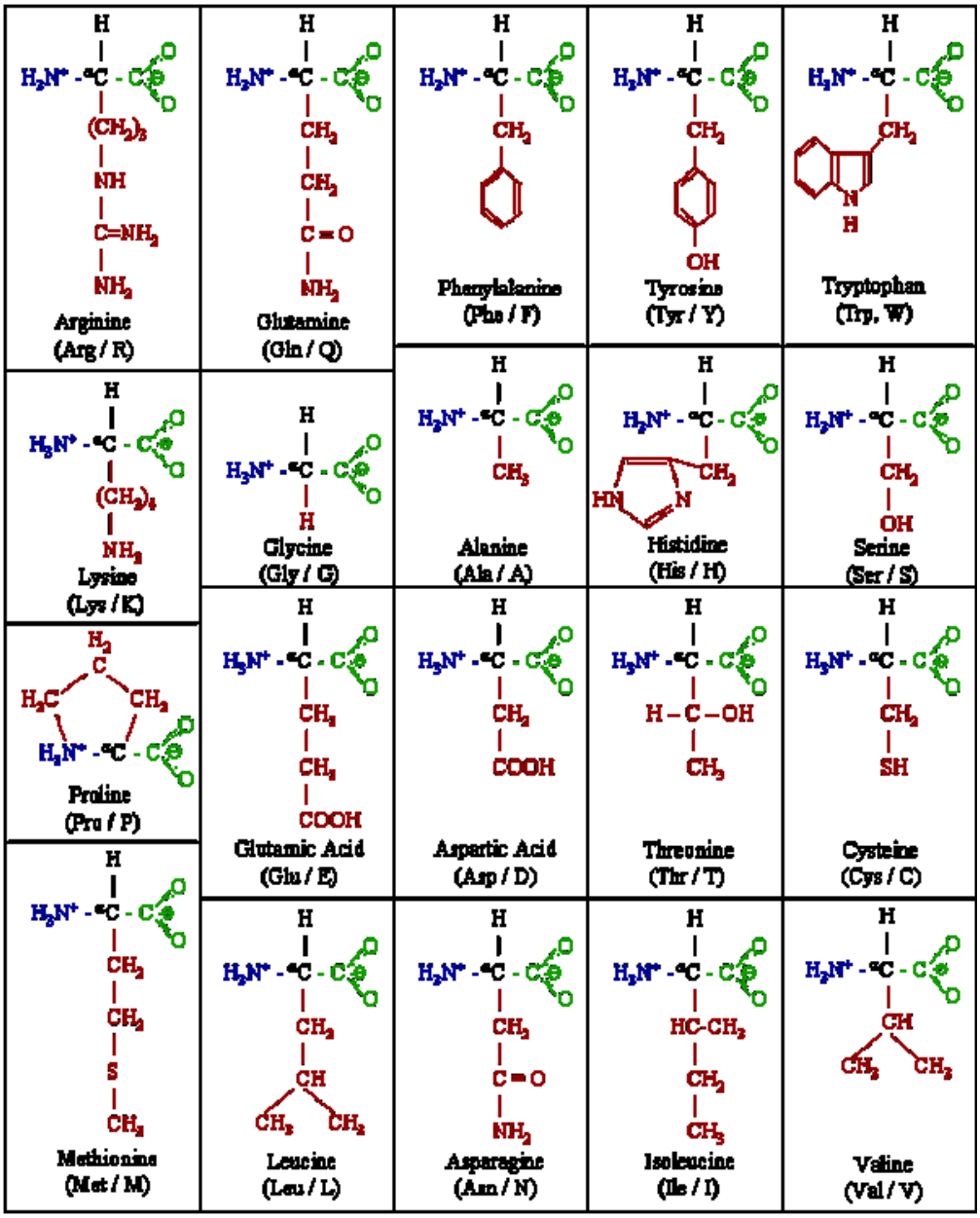
two dogs of the same breed



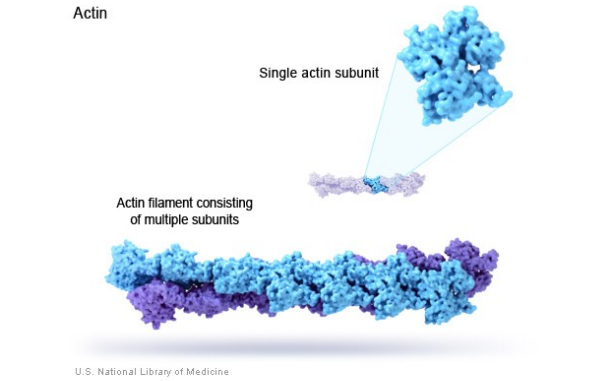
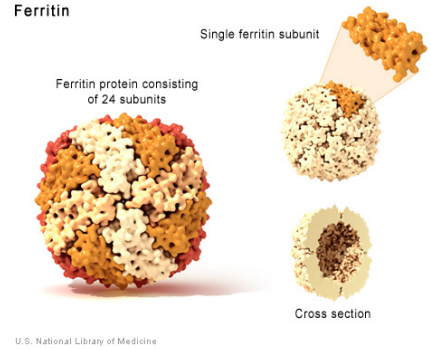
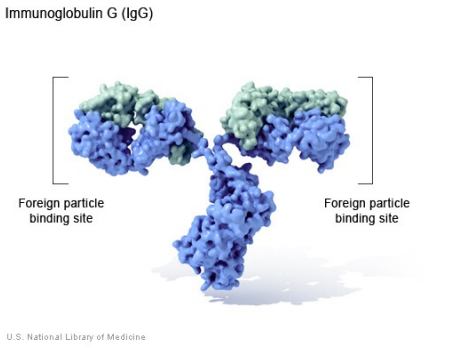
two fruit flies facing each other

Proteins and Amino Acids- Transparency 12.2

Protein are molecules built from a string of amino acids. Here are the twenty possible type of amino acids that can be used to build a protein.



Structure and Function of Some Proteins - Transparency 12.3

	**The protein on the far left (melanin) is partially responsible for producing the substances that give humans their hair and skin color.**
 Actin filaments, which are structural proteins made up of multiple subunits, help muscles contract and cells maintain their shape.	**This protein (actin) helps muscle contract and cells maintain their shape.**
 Ferritin, a protein made up of 24 identical subunits, is involved in iron storage.	**This protein (ferritin) helps store iron in cells. It is built from a chain of 24 identical amino acids.**
 Immunoglobulin G is a type of antibody that circulates in the blood and recognizes foreign particles that might be harmful.	**This protein (immunoglobin G) binds to foreign particles in your blood that might be harmful.**

Reviewing the Mechanisms of Evolution

Lesson 13 Transparency 13

	mechanism of evolution					
Outcomes of this mechanism	**competition for limited resources**	**new combinations of trait variations in offspring from sexual reproduction**	**genetic drift**	**natural selection**	**changes in environmental conditions**	**mutations**
is the result of random events or interactions						
Can result in individuals with combinations of trait variations different than those in previous generations						
can add brand new genes and alleles into the gene pool of a population						
can remove existing variations of a trait from a population						
can contribute to a population becoming better adapted to survive a particular environment						
will generate the exact same outcome every time.						