

Ch. 7: incomplete dominance + codominance

- both alleles in a genotype can show up in a phenotype.
- heterozygous flowers are diff. than both parents
- Codominance - offspring will show characteristics of both homozygotes.

A + B - Dominant	A	B	AB	O
⓪ - Recessive	AA	BB	AB	OO
Type A	AO	BO		

Homework: single strand of DNA = 21 letters w/ 3 letter groups
 - 3 letter groups = 1st + TAC last = ACT

TAC CCG ATA TGA CCA AAA ACT
 TAC TTT ATG GAT CAT TTA ACT
 TAC TGT ACT TTA TAC CGT ACT

DNA: How it works:

Genotype + Phenotype

- Gma's cookies
- DNA + RNA
- Nucleus carries DNA
- converts to RNA to
- RNA is single strand - compliment of DNA
- strand with 1 change
- U takes place of T
- U pairs w/ A
- ribosomes let U out of nucleus

- ① Unzip DNA - build compliment
 - ② Take the compliment
 - ③ Replace all of the T's w/ U's
- * Very imp - do this after

● = w/fangs
○ = normal

A = Fangs
a = Normal teeth

- RNA leaves
 - protein factory
 - * each 3 letter code codes for spec amino acid

- Ribosomes
 - Starts reading for amino acid
 - 95% is junk DNA
 - reads looking for start code until it gets stop code, continues to read looking for start code again
 - * every 3 letter codes for specific amino acid
- each chain of amino acids folds into a specific shape
 - order determines shape
 - same code same shape.

DNA > RNA > Protein

DNA Replication:

- when, where, how?
- where - Nucleus (where DNA is held)
- when - All the time (constant) - cell cycle

when → **interphase** - cells grow & make copies of DNA

How

important for test

- ① DNA molecules/unzip
- ② Read bases
- ③ complimentary bases paired on each of 2 strands
- ④ both strands are proof read
- ⑤ Mistakes cut out & corrected
- ⑥ Process resumes

Damage to genetic code | cause & effects

- bad reputation
- tend to be disruptive
- very, very, rare → 1000 mistakes/hour

DNA = TAC CCG ATA TGA CCA AAA ACT

reversal { RNA = AGC GGC TAT ACT GGT TTT TGA
complement

replace T w/U → AGC GGC UAU ACU GGU UUU UGA

read codes ↓ ↓ ↓ ↓ ↓ ↓ ↓

- Methionine - Glycine - Tyrosine - Threonine - Glycine - Phenylalanine - STOP

* continues to read *

cont from other page

- mutation in indiv cell not rare but ~~is~~ because you make so many other good cells that cell will not change anything

- mutation in gametes = can change variables passed on to next generation

2 basic mutations

Point - changes amino acid (base)

- can be an issue / but not mostly

Chromosomal - addition or deletion

- letter is missing from 3 letter codes

- changes all other amino acids

- lethal

- illegible

Causes -

① Mistake in copy of DNA

- can't prevent (natural)

② Chemical exposure

- Radiation (x-rays) - risks can be minimized

③