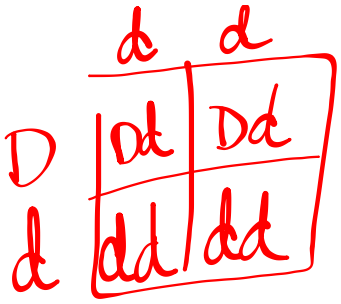
Bell Work

January 18th



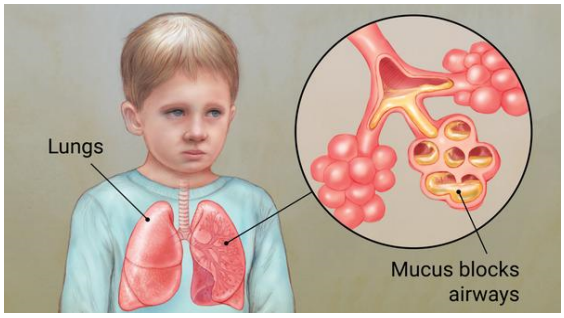
1. Dimples are dominant. Cross a heterozygous woman with a man who doesn't have dimples. What is the probability they will have a child without dimples?

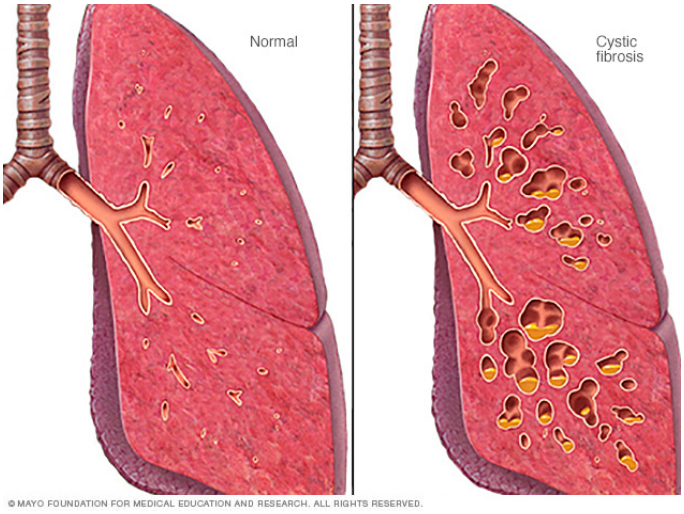
Genetic Disorders (Normal Dominance)

Recessive Disorders

- genotype: homozygous recessive
- **carrier**: individual who has a heterozygous genotype, does not have the disorder, but can pass a recessive allele to offspring

examples: cystic fibrosis (CF)
albinism


Lungs
Mucus blocks airways


Normal
Cystic fibrosis
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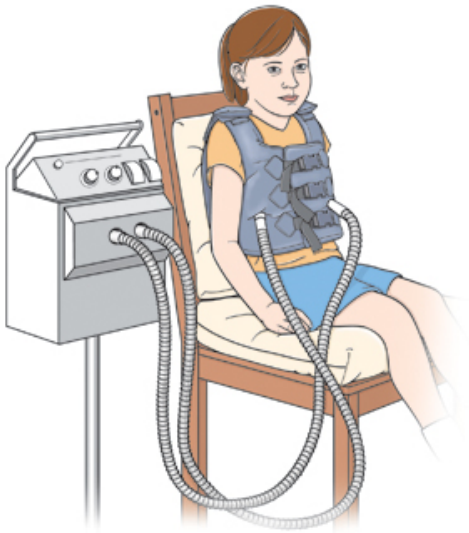
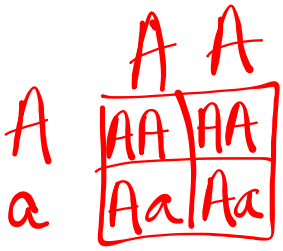
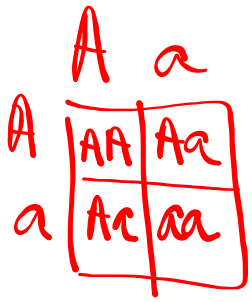


Recessive genetic disorders

1. Cross a woman who doesn't have cystic fibrosis with man who is a carrier.

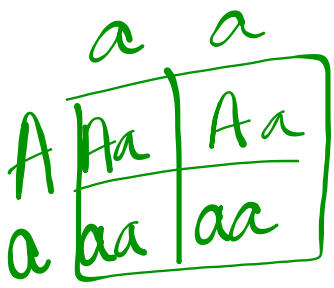


2. Cross a woman who is a carrier of albinism with a man who is a carrier of albinism.



Bell Work

January 19th



1. What does the term carrier mean?

2. Albinism is a *recessive* disorder. Cross a woman who is a carrier with a man who is albino.

3. What is the probability they will have a child who is albino? What is the probability they will have a child who is a carrier?

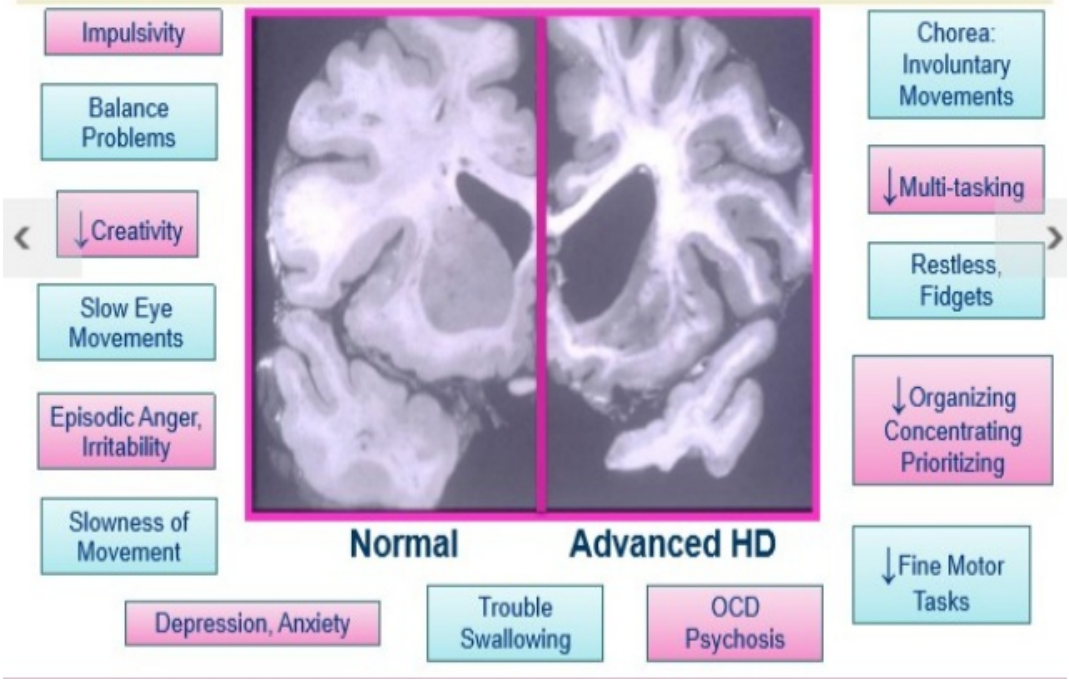
Dominant Disorders

- only need to inherit 1 dominant allele

examples: achondroplasia
Huntington's disease
polydactyly

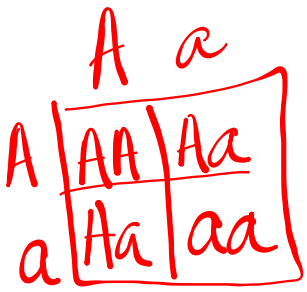

GQ

Symptoms in Huntington's disease



Dominant genetic disorders

1. Cross a man and a woman who are both heterozgous for polydactyly.



2. Cross a heterozygous woman with huntington's disease and a man without huntington's disease.