

Genetics Alternate Assignment

1. Identify, explain, and apply Mendelian genetics including laws, simple heredity, and use of Punnett Squares.

Create a poster

Demonstrate a simple cross between two heterozygous individuals for some trait. Describe what the phenotype for dominant trait is, and what the phenotype for the recessive trait is. Include the phenotypic and genotypic ratio that occurs from the cross.

Demonstrate a dihybrid cross between two individuals for two different traits. Make one individual Heterozygous for both traits and one Homozygous Recessive for both traits. Describe what the phenotype for dominant trait is, and what the phenotype for the recessive trait is. Include the phenotypic and genotypic ratio that occurs from the cross.

Define the following terms on the poster: Genotype, Phenotype, Trait, Homozygous, Heterozygous, Dominant, and Recessive.

2. Explain how genetic diversity is increased through the processes of crossing over and mutations.

Issue.com (You will need to create a free account to do this.)

Create an online magazine using issue.com that explains how and why genetic diversity increases through the processes of crossing over and mutations. You must include both images and descriptions and it must be a minimum of 2 information pages.

Format:

Title Page (Name, Date and Title)

Information pages (2 pages)

Reference Page

Outlining the e-book pages:

1. Begin with a word document and set the margins to 1" on both sides and .8" on top and bottom.
2. Drag or upload the images you plan on using to the page.
3. Click each picture and set it to "square" within the "Wrap Text" button seen here.
4. Arrange the images in the way you like...make it look like a magazine spread.
5. Using text boxes for the information is probably the easiest...but not necessary.
6. Once the pages are complete save your document!!!
7. Go to issuu.com and create an account (you must have an email address)
8. Upload the document to issuu.com as a magazine and share it.



3. Identify and explain complex patterns of inheritance including interpreting pedigrees.

Issue.com (You will need to create a free account to do this.)

Create an online magazine using issue.com that describes all of the complex patterns of inheritance discussed in class including multiple alleles, sex linked traits, polygenic inheritance, incomplete dominance, and codominance. You must include both images and descriptions and it must be a minimum of 2 information pages.

Format:

Title Page (Name, Date and Title)

Information pages (2 pages)

Reference Page

Outlining the e-book pages:

9. Begin with a word document and set the margins to 1” on both sides and .8” on top and bottom.
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