Name: _____ Score: _____

9 Multiple choice questions

Term 1 of 9

What is a carrier of a recessive disorder?

- A person with one recessive allele (Aa) who does not show symptoms but can pass it on.
- A person with two dominant alleles (AA) who shows symptoms.
- A person with one dominant allele (Aa) who shows symptoms.
- A person with two recessive alleles (aa) who does not show symptoms but cannot pass it on.

Term 2 of 9

How many copies of the dominant allele are needed to express the disorder?

- Two copies – only homozygous recessive (aa).
- One copy – either heterozygous (Aa) or homozygous dominant (AA).
- Three copies – either heterozygous (Aa) or homozygous dominant (AA).
- One copy – only homozygous dominant (AA).

Term 3 of 9

How many copies of the recessive allele are needed to express the disorder?

- One copy – heterozygous (Aa).
- Three copies – homozygous dominant (AA).
- Two copies – homozygous recessive (aa).
- Two copies – heterozygous dominant (AA).

Term 4 of 9

What is a dominantly inherited disorder?

- A disorder caused by multiple dominant alleles.
- A disorder caused by two copies of a recessive allele.
- A disorder caused by a single copy of a dominant allele.
- A disorder caused by a mutation in mitochondrial DNA.

Term 5 of 9

What is the chance two carriers will have an affected child?

- 100% chance of carrier (aa), 0% chance of affected (aa).
- 50% chance of unaffected (aa), 25% chance of affected (aa).
- 75% chance of affected (aa), 25% chance of carrier (aa).
- 25% chance (aa), 50% chance of carrier (Aa), 25% chance of unaffected (AA).

LIVEWORKSHEETS

Term 6 of 9

What is an example of a dominantly inherited disorder?

- ○ **Parkinson's disease.**
- ○ **Huntington's disease.**
- ○ **Alzheimer's disease.**
- ○ **Tay-sachs disease.**

Term 7 of 9

Can a person with one affected parent inherit a dominant disorder?

- ○ **Yes – there's a 100% chance if the parent is homozygous.**
- ○ **No – inheritance is only possible if both parents are affected.**
- ○ **No – there's a 0% chance if the parent is heterozygous.**
- ○ **Yes – there's a 50% chance if the parent is heterozygous.**

Term 8 of 9

What is a recessively inherited disorder?

- ○ **A disorder that appears only when both alleles are recessive.**
- ○ **A disorder that appears only in males.**
- ○ **A disorder that is always expressed regardless of alleles.**
- ○ **A disorder caused by a single copy of a dominant allele.**

Term 9 of 9

What is an example of a recessively inherited disorder?

- ○ **Turner syndrome or Down syndrome.**
- ○ **Cystic fibrosis or sickle cell anemia.**
- ○ **Huntington's disease or Marfan syndrome.**
- ○ **Hemophilia A or muscular dystrophy.**

LIVEWORKSHEETS