



## Pedigrees Practice - Human Genetic Disorders

In humans, **albinism** is a recessive trait. The disorder causes a lack of pigment in the skin and hair, making an albino appear very pale with white hair and pale blue eyes. This disorder can also occur in animals, a common albino found in a laboratory is the white rat. The pedigrees below trace the inheritance of the allele that causes albinism.



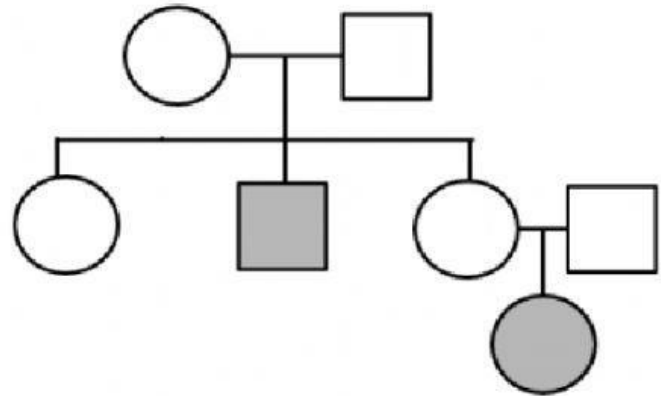
1. Given the following genotypes, describe the phenotypes (normal or albino)

AA = \_\_\_\_\_

Aa = \_\_\_\_\_

aa = \_\_\_\_\_

Fill out the blanks on the pedigree →



- How many children does the couple have?
- What is the sex of the oldest child?
- How many grandchildren does the couple have?

2. Fill out the blanks of the pedigree (AA, Aa, or aa).

a) How many children did the original couple have?

b) How many grandchildren?

c) How many of their grandchildren are albino?

d) Create an extension to the pedigree to show the albino granddaughter marrying and having a son who is NOT albino.

