

1 Pedigrees

Mark L. Mayo
Cypress College

2 Pedigree Basics

- A pedigree is a graphical representation of family trees showing the distribution of a genetic trait over several generations

3 Pedigree Basics

- Males are squares

- Females are round

4 Pedigree Basics

- A line between a square and a circle indicates mating (sex)
- This line shows success
- The squares and circles connected to that successful mating line are their children (1-6)

5 Pedigree Basics

- Light males and females do not have the disease or condition
(ie. they are homozygous dominant AA
or heterozygous Aa – **a carrier**)

Dark males and females have the disease or condition

(they are homozygous recessive aa)

6 Pedigree Basics

- If two light individuals mate and produce dark offspring (aa), what is their (the parent's) genotype?
 - a) Homozygous dominant
 - b) Heterozygous
 - c) Homozygous recessive