GENETICS
LESSON 8: SEX-LINKED TRAITS & PEDIGREES

Learning Outcomes

- **I can use a Punnett square to determine the probability of genotypes and/or phenotypes for sex-linked traits.**
- **I can use a Punnett square to interpret a pedigree analysis.**

Sex-Linked Traits

- _____
  _____
- _____
  _____
- Example: colour blindness
  - _____
    - _____
    - _____

	Male Normal Vision	Male Colour Blind
Female Normal Vision		
	____% chance colour blind female ____% chance colour blind male	____% chance colour blind female ____% chance colour blind male
Female Carrier		
	____% chance colour blind female ____% chance colour blind male	____% chance colour blind female ____% chance colour blind male
Female Colour Blind		
	____% chance colour blind female ____% chance colour blind male	____% chance colour blind female ____% chance colour blind male

Pedigree Analysis

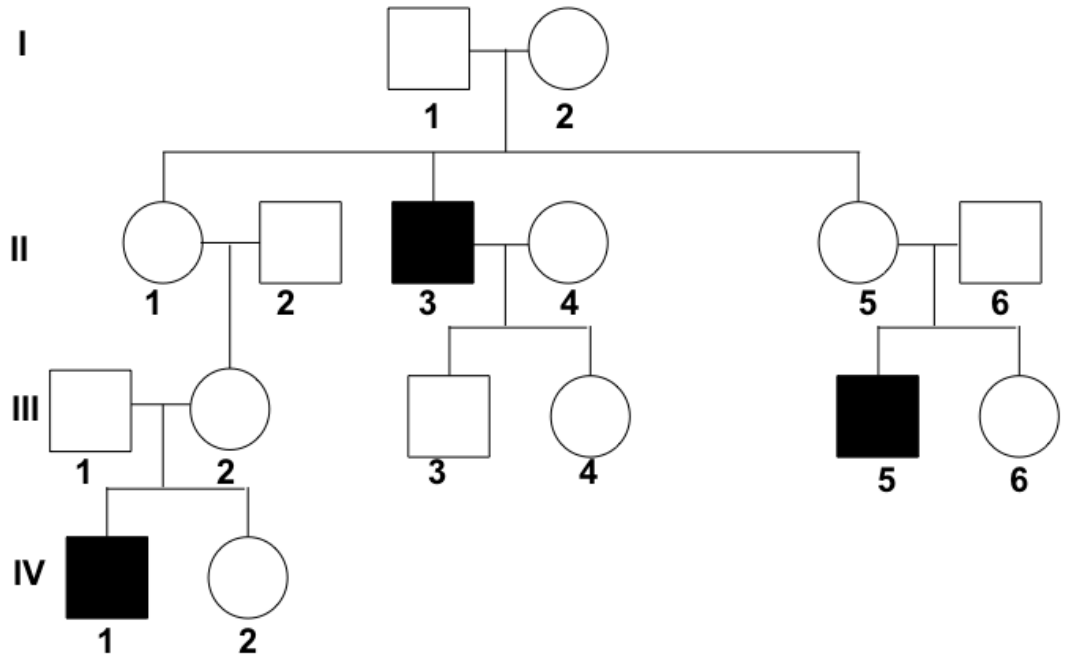
- _____

  _____

- _____

  _____

- the common symbols used are:
  - circles = _____ square = _____
  - shaded = _____ unshaded = _____
  - _____
  - _____
  - _____
  - _____
- example: Colour blindness pedigree



Questions

1. What is the genotype of the male child II-3?
2. What are the genotypes of his parents?
3. What are the genotypes of his children (III-3 and III-4)?
4. What is the genotype of wife (II-4)?
5. Is this condition caused by a dominant or recessive allele?