

## Chapter 14: The Human Genome

### Pedigree Charts

- A family history of a genetic condition

What is a pedigree chart?

**PEDIGREES** are diagrams that show how **genes are passed** on **in families** over several generations

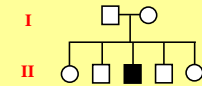
**PEDIGREE Charts** can be used to study the transmission of a hereditary condition

## Drawing a pedigree chart

### Symbols

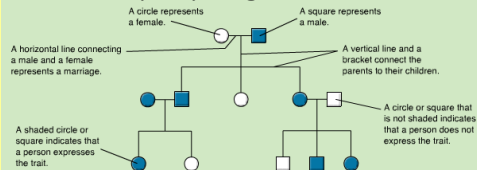
- Normal male
- Affected male
- Normal female
- Affected female
- Marriage
- Carrier (this is not always known)

A marriage with five children, two daughters and three sons. The eldest son is affected by the condition.



Eldest child ↔ Youngest child

## Example pedigree chart



### Quick Check:

- 1) How many generations are included in this pedigree chart?
- 2) Is the unmarried child in the 2<sup>nd</sup> generation a male or female?
- 3) How is it possible for this child to NOT express the trait?

## Inheritance of Red-Green Color Blindness: an X-linked Recessive Trait

