**GENETICS - PEDIGREES**

Pedigrees are charts that show the inheritance of a certain trait through a family. Pedigrees allow us to identify if a trait follows a specific inheritance pattern:



Fraternal Twins

**In the pedigree above,**

1. **How many males are there?**
2. **How many females are there?**
3. **How many children does the first couple have?**
4. **Why do you think only the males are affected?**

PRACTICE: DRAWING PEDIGREES

**In the box, draw a pedigree for a man and a woman with 4 children.
Of the children:**

* 3 are males and 1 is female
* 2 of the males are identical twins
* The 3 males are affected and the female is a carrier
* The mother is a carrier
* The father is unaffected

**USING PEDIGREES TO IDENTIFY INHERITANCE:**

*Discuss: How can two straight-haired adults have a curly haired child?*

Pedigrees can give us clues to whether a trait is **autosomal** (on any chromosome) or **sex-linked** (on the X chromosome). Look for these patterns:

TRY THIS:

Identify the type of inheritance most likely in each pedigree:



Type of Inheritance:



Type of Inheritance:

**Does not skip a generation**

**At least one parent is affected**

**May skip a generation**

**Two unaffected parents can create an affected offspring**

**Does not skip a generation**

**More common in females than males**

**May skip a generation**

**More common in males than females**