Pedigree Symbols:

□ = MALE   ◯ = FEMALE
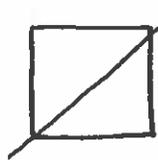
▨ = DECEASED MALE
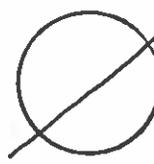
⊘ = DECEASED FEMALE

■ = AFFECTED MALE

● = AFFECTED FEMALE
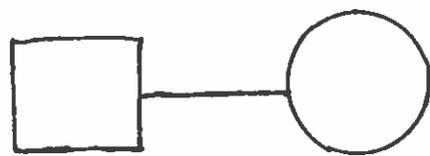
□——◯ = MARRIED/MATED
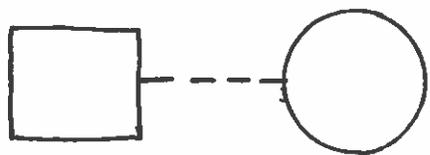
□----◯ = DIVORCE/NO LONGER TOGETHER

I □₁——◯₂ = PARENTS
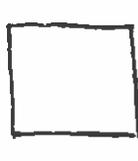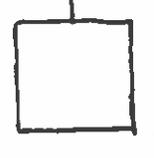
II ◯₁ □₂ = CHILDREN (SIBLINGS)
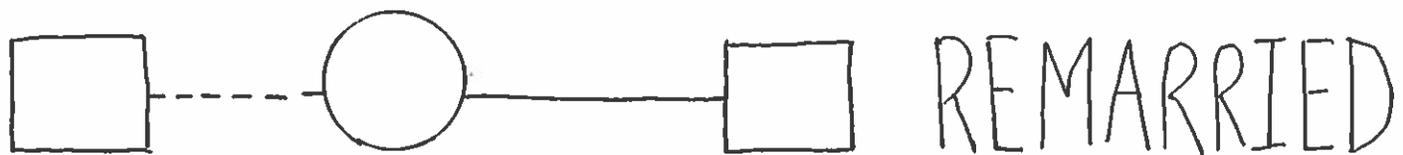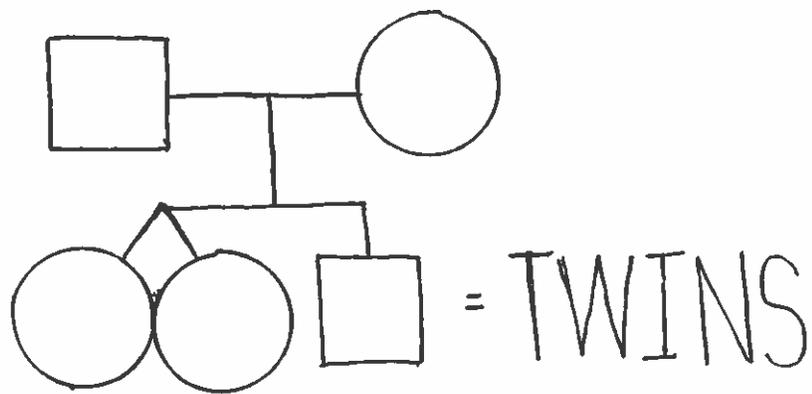
= TWINS

REMARRIED

= CARRIER MALE

= CARRIER FEMALE

Making Pedigrees

A pedigree is a diagram that shows how traits are passed from one generation to the next in a family. A pedigree usually starts with a married couple in the first generation, and then shows their children in the second generation, their grandchildren in the third generation, and so on. Standard symbols that are used to represent males, females, and the relationships among individuals are shown in the figure to the right.
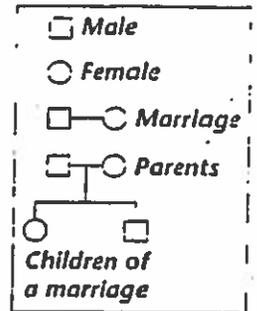
The sample pedigree below is similar to the pedigree you will create for the Chapter 4 Project. Study the sample pedigree, and then answer the questions that follow.

□ Male
○ Female
□—○ Marriage
□—○ Parents
Children of a marriage
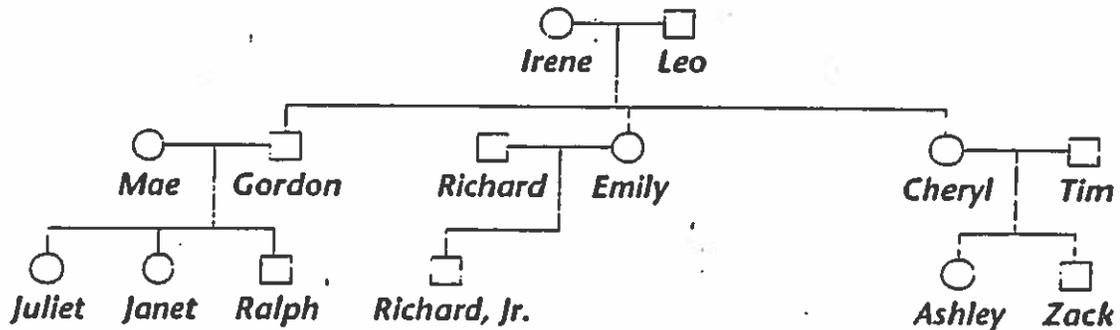
Write your answers in the spaces provided.

1. What is the name(s) of Irene's and Leo's son(s)? What is the name(s) of their son(s)-in-law?

_____

2. How many grandchildren do Irene and Leo have? How many of their grandchildren are girls?

_____

3. What is the name of Ralph's father? What is the name of Ashley's mother?

_____

4. What is the name of Emily's son? What is the name of Tim's son?

_____

5. After this pedigree was made, Richard and Emily had another son, whom they named Roger. Juliet married a man named Robert and had a daughter named Elizabeth. Zack married a woman named Jean and had a son named Craig. Add all of these individuals to the pedigree.

1. Draw a pedigree that represents Mary married to Greg and with 2 sons (Scott and Tyler) and 1 daughter (Karen). Please label the pedigree with the names of the people.

2. Draw a pedigree that represents Mary married to Greg, with 2 sons and 1 daughter. Their son, Scott, married April and had Sutton (a boy) and Kendall (a girl). Their daughter, Karen, married Harry and had Eliq (a son) and Tariq (a son). Please label the pedigree with the names of the people.

Making Pedigrees

A pedigree is a diagram that shows how traits are passed from one generation to the next in a family. A pedigree usually starts with a married couple in the first generation, and then shows their children in the second generation, their grandchildren in the third generation, and so on. Standard symbols are used to represent males, females, and the relationships among individuals as shown:
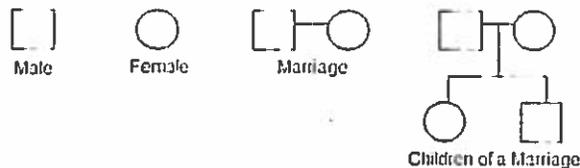

The sample pedigree below is similar to the pedigree you will be using. Study the sample and answer the questions that follow:
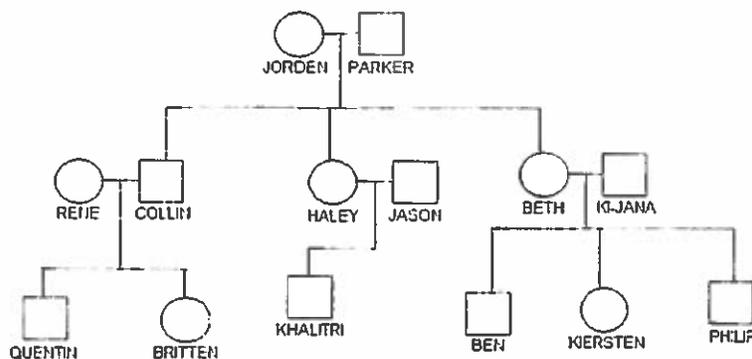
1. What is the name(s) of Jorden's and Parker's son(s)?

2. How many grandchildren do Jorden and Parker have? How many of them are girls?

3. What is the name of Khalitri's father?

4. What is the name of Rene's son?

Tracing the Widow's Peak Gene

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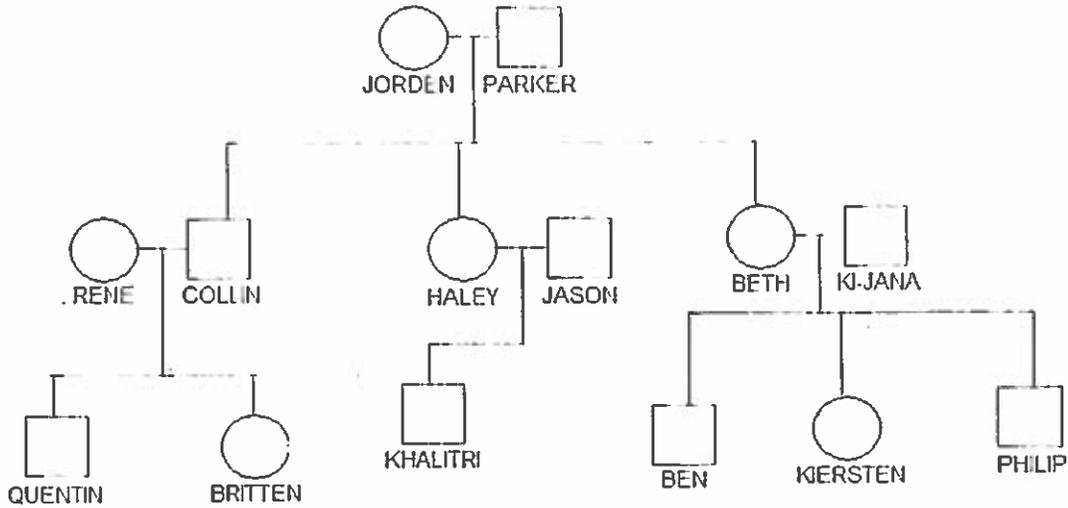
The gene for a widow's peak is a dominant gene. Jorden has a widow's peak, Parker does not. Haley, Collin and Beth are all carriers of the widow's peak gene. Rene has a widow's peak and so do Quentin and Britten. Jason and Khalitri do not have a widow's peak. Ki-jana has a widow's peak, and so do Ben, Kiersten and Philip. Shade each circle or square to show who has a widow's peak.

Tracing the Dimples Gene
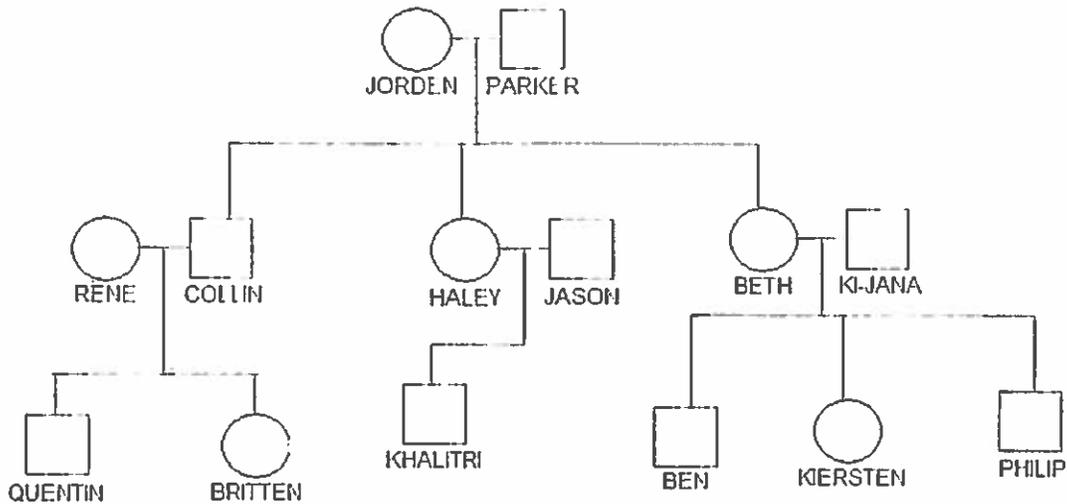
The gene for dimples is a recessive gene. Jorden has dimples, Parker does not have dimples, but he is a carrier of the gene. Collin, Haley and Beth all have dimples. Rene does not have dimples and she is not a carrier of the gene. Jason has dimples. Ki-jana is a carrier of the dimple gene. Quentin and Britten do not have dimples but they both carry the gene. Khalitri has dimples. Ben and Kiersten both have dimples, Philip is only a carrier of the gene.

Use this information to shade each color or square to show family members who have the dimples gene.