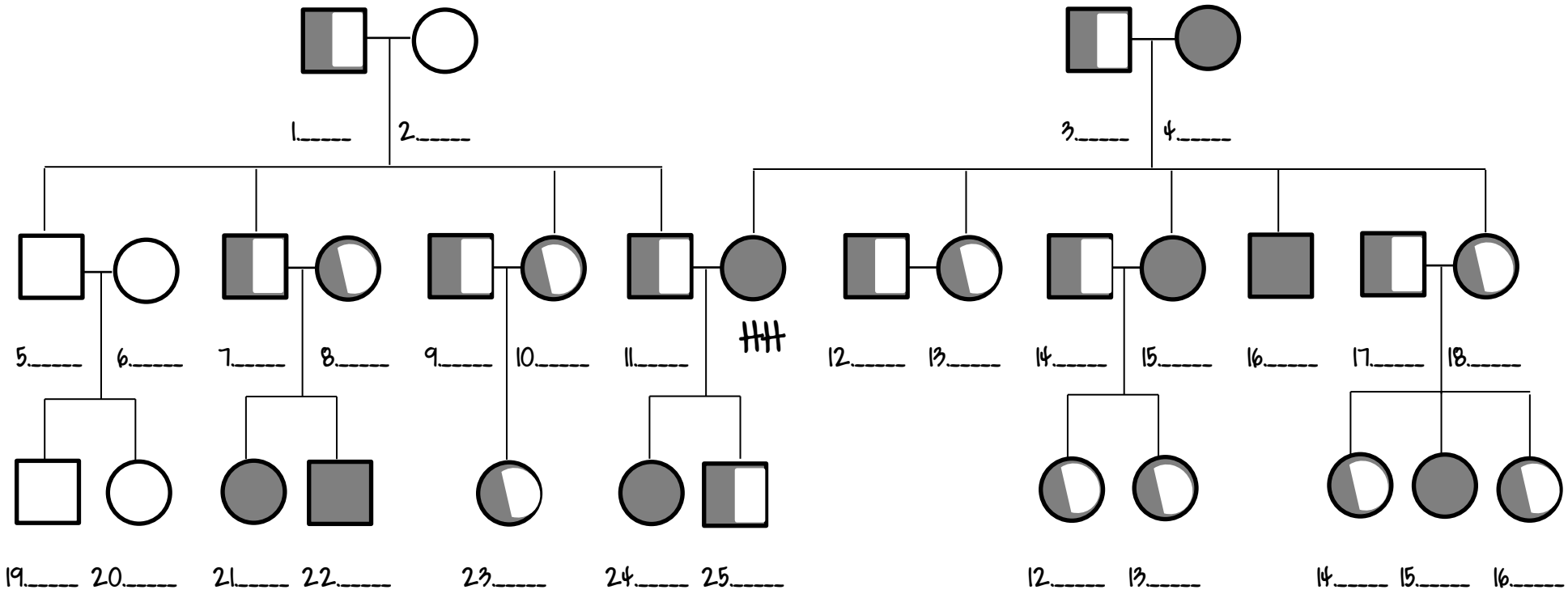
Biology: Chapter 14 **Pedigree Charts** Name _____Period_____

Directions: Study the pedigree charts and answer the questions.

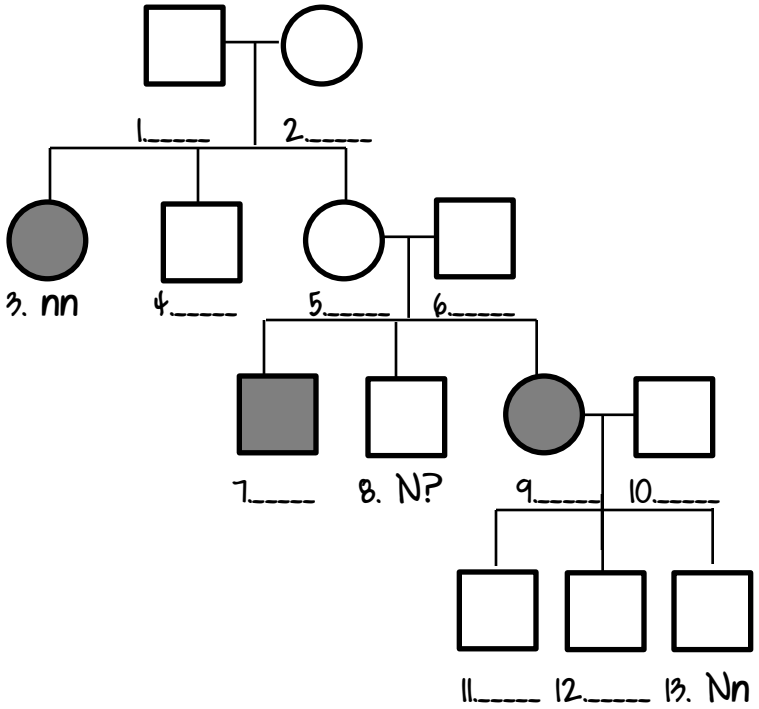
Mrs. Heier's Family Pedigree for Hair Type HH=curly hair Hh=wavy hair hh=straight hair (Mrs. Heier in the middle of the chart.)



1. Record the genotypes for each of my family members on the pedigree chart.
2. How many sisters do I have (do not include sister-in-laws)?
3. How many brothers do I have (do not include brother-in-laws)?
4. What is my father's phenotype?
5. How many nephews do I have with wavy hair?
6. How many nieces do I have with straight hair?
7. When I was born, what percent chance did I have of inheriting straight hair? (hint: draw a Punnet square)
8. What relationship is number #1 to me?
9. Identify my children on the pedigree chart (what numbers)?
10. What does incomplete dominance mean?

Pedigree for a family with Nearsightedness

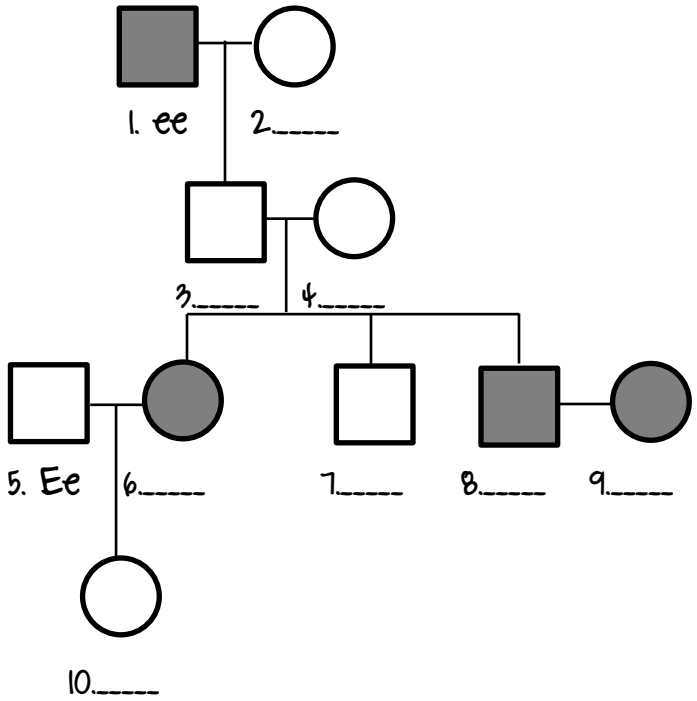
Nearsightedness-or myopia-is a recessive trait. Use the symbols N and n to label the genotype for each of the numbered individuals. The shaded regions indicate individuals who are nearsighted.



1. Record the genotypes for each of the family members on the pedigree chart.
2. How many generations are shown in the pedigree?
3. How many offspring did the parents in the first generation have?
4. How many of those children (question #3) are married?
5. If the couple (#9 & #10) have another child what percent chance will that child have of inheriting nearsightedness?(hint: draw a Punnet square)

Pedigree for Free or Attached EAR Lobe Traits

Free ear lobes is a dominant trait. Attached ear lobes is a recessive trait. Use the symbols E and e to label each of the numbered individuals. The shaded regions indicate individuals with attached ear lobes.



1. Record the genotypes for each of the family members on the pedigree chart.
2. How many generations are shown in the pedigree?
3. How many offspring did the parents in the second generation have?
4. How many of those children (question #3) are married?
5. If the couple (#8 & #9) children what percent chance will they have of inheriting attached earlobes?(hint: draw a Punnet square)