

Name: _____

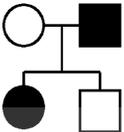
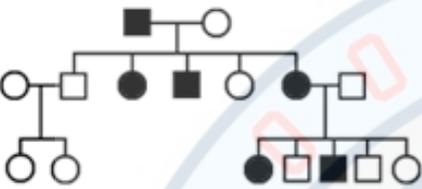
Date: _____

Period: _____

The Romanov Family

Week # _____

Directions: Analyze each pedigree to complete each description.

Pedigree	Description
	<p>In the pedigree, there are _____ generation being illustrated. Two individuals had a _____ and then a _____. The _____ and _____ are both affected by the trait being illustrated in the pedigree.</p>
	<p>In the pedigree, there are _____ generations shown. In the first generation, two individuals had _____ total children, _____ girls and _____ boys. _____ of the children are married. In the third generation, there are _____ individuals. In the pedigree, there are _____ females that are affected and _____ males that are affected by the trait being illustrated.</p>

Directions: Read and annotate the passage below.

In 1904, a great wave of celebration swept through the vast Russian Empire. At long last, after four successive daughters, the czar (king) and czarina (queen) produced a son, an heir to the throne. The little boy, who was given the name Alexis, seemed destined for a great future. In addition to having been born heir to the throne of the world's largest country, he was kin to many of the royal and aristocratic families in Europe. His great grandmother, Victoria, who died only 3 years before, reigned as Queen of England for more than half a century. That was the period when the British Empire reached its greatest heights of power and influence. The royal families of England, Spain, Prussia, and Germany, were all related to Alexis. Even though the huge empire of his father, Nicholas II, was troubled, everyone expected that this new little heir would provide a sense of stability as he and the new century grew together.



Unfortunately, the little boy was not well. He had been born with hemophilia. In this disease, the blood clots so slowly that the person can bleed to death from a minor injury. For him, even the most minor childhood accidents meant fits of painful and potentially fatal illness. Czar Nicholas was so obsessed with the health of his only son that he failed to devote adequate attention to the many problems of Russia. The boy's mother, Czarina Alexandra, became even more preoccupied with her son than the Czar. She was tormented by the possibility that her son's illness came from her side of the family. The preoccupation of the Czar's family with Alexis's hemophilia may have contributed to the downward spiral of social disorder that triggered the Russian Revolution of 1917. Ultimately, this revolution led to the murder of the entire imperial family by agents of the Bolsheviks in July of 1918. The story of young Alexis and his family is filled with drama and tragedy. It also illustrates a number of features about the inheritance of biological traits in both humans and other complex organisms.

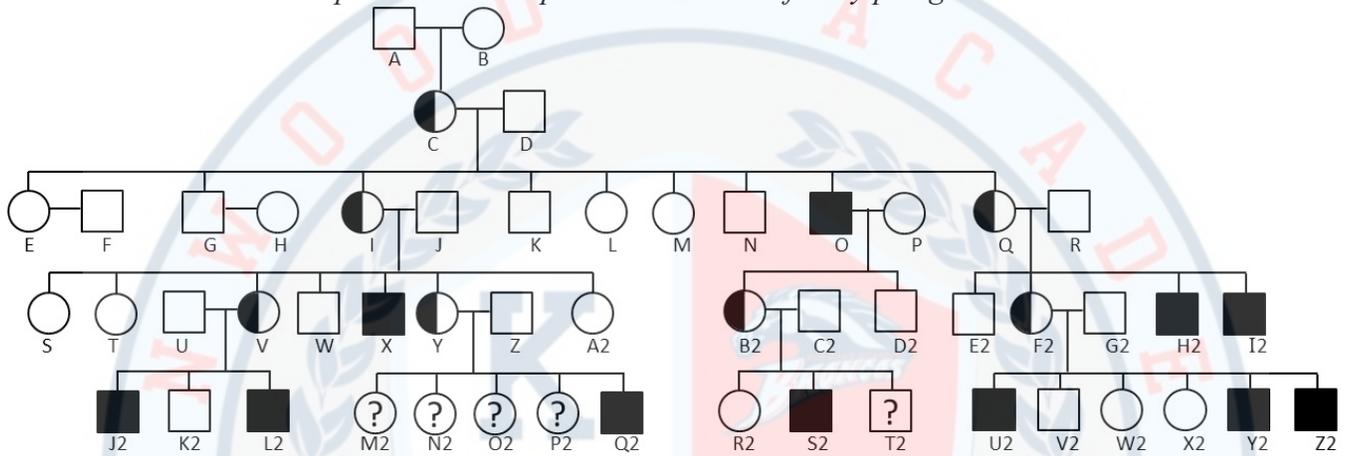
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1. (RST.9-10.4) Explain the meaning of these words using context clues and prefixes/suffixes.

- a. successive: _____
- b. kin: _____
- c. preoccupied: _____
- d. tormented: _____

2. Based on your knowledge of blood, what part of the blood is likely effected by hemophilia? Explain.

Directions: Use the clues provided to complete the Romanov family pedigree.



- | | | | |
|-------------------|----------|-----------|-----------|
| A. _____ | N. _____ | A2. _____ | N2. _____ |
| B. _____ | O. _____ | B2. _____ | O2. _____ |
| C. Queen Victoria | P. _____ | C2. _____ | P2. _____ |
| D. _____ | Q. _____ | D2. _____ | Q2. _____ |
| E. _____ | R. _____ | E2. _____ | R2. _____ |
| F. _____ | S. _____ | F2. _____ | S2. _____ |
| G. _____ | T. _____ | G2. _____ | T2. _____ |
| H. _____ | U. _____ | H2. _____ | U2. _____ |
| I. _____ | V. _____ | I2. _____ | V2. _____ |
| J. _____ | W. _____ | J2. _____ | W2. _____ |
| K. _____ | X. _____ | K2. _____ | X2. _____ |
| L. _____ | Y. _____ | L2. _____ | Y2. _____ |
| M. _____ | Z. _____ | M2. _____ | Z2. _____ |

- 3. There are _____ males in the pedigree and there are _____ females in the pedigree.
- 4. There are _____ generations shown in the pedigree.
- 5. What gender appears to be affected by hemophilia more? _____
- 6. Hypothesize why one gender is affected by hemophilia more than the other gender.

7. How did Alexis have hemophilia if neither his mother nor his father had hemophilia?

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Romanov Family Pedigree Clues

1. Victoria, Queen of England, was the daughter of Edward, Duke of Kent, and Victoria, Princess of Saxe-Coburg. She married her cousin Albert.
2. Victoria had 9 children with her husband Albert. They were: Victoria II, Edward VII, Alice, Alfred, Helena, Louise, Arthur, Leopold, and Beatrice.
3. Some of Victoria and Albert's children got married: Victoria II married Frederick, Edward VII married Alexandra, Alice married Louis, Leopold married Helen, and Beatrice married Henry.
4. Victoria II and Edward VII had families; however, none of them were affected by hemophilia. Because of this, we are not showing their families on the pedigree chart.
5. Alice and Louis had 7 children. They were: Victoria, Elisabeth, Irene, Ernest, Frederick, Alix, and Marie. Irene married her cousin, Prince Henry of Russia. They had 3 boys: Waldemar, Wilhelm, and Henry. Alix married Tsar Nicholas II of Russia. They had 5 children: Olga, Tatiana, Maria, Anastasia, and Alexis.
6. Leopold and Helen had 2 children: Alice and Charles. Alice married her second cousin Alexander. They had 3 children: May, Rupert, and Maurice.
7. Beatrice and Henry had 4 children: Alexander, Eugenie, Leopold, and Maurice. Eugenie married Alfonso XIII of Spain. They had 6 children: Alfonso, Jaime, Beatriz, Maria, Juan, and Gonzalo.

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