



Name _____

Date _____

SICKLE CELL TRAIT/ANEMIA -Worksheet

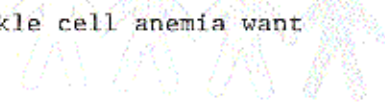
Hemoglobin is the oxygen-carrying molecule of red blood cells. There are many types of hemoglobin. The two best known types are normal hemoglobin (A) and sickle hemoglobin (S). The gene for hemoglobin A is symbolized by the letter "A." The letter "S" symbolizes the gene for hemoglobin S. People who are interested in the recessive condition, sickle cell anemia (SS) or in sickle cell trait (AS) can learn a lot by reading pamphlets.

In this activity, you will use the pamphlet entitled "Sickle Cell Anemia" and your notes to answer the following questions:

1. Why is this condition called sickle cell anemia?

2. Complete the following table to indicate the major differences between sickle cell trait and anemia.

	trait	anemia
genotype(s)		
hemoglobin type(s)		
incidence		
symptoms		
treatment required		

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3. Why might someone with sickle cell trait or sickle cell anemia want genetic counseling?
 4. Who has a greater chance of having a child with hemoglobin S, someone who has the trait or who has anemia? Explain.
 5. Why does the diagram in the pamphlet show a family with four offspring?
 6. Could you find out if you have sickle cell anemia by having your blood typed? Explain.
 7. Can a white person have sickle cell anemia? _____ What other conditions are found more frequently in specific ethnic populations?
 8. If you had never had Biology, what would be the hardest part of this pamphlet to understand?
 9. If you were funding research projects, which of the four projects listed on the back of the pamphlet would you support? Why did you choose this one?
 10. Would you mind receiving a blood transfusion from someone who has sickle cell trait? Explain.