Sickle Cell Anemia Reading

Pre-Reading Questions:

1. What do you know about red blood cells and their purpose in your body?

2. Can you speculate as to what symptoms you may have if your red blood cells weren’t functioning properly?

Article Link:
http://learn.genetics.utah.edu/content/disorders/singlegene/sicklecell/

Answer the following questions as you read the article.

1. Explain the importance of shape in the function of a red blood cell. How does sickle cell anemia affect the shape and what happens to the blood cells as a result?

2. If you mother has sickle cell but your father doesn’t, can you inherit the disease?

   In what circumstances can your kids get the disease?

3. What specifically is happening in the body of someone with sickle cell anemia when they go through a painful episode?

4. When would you most likely find out that you have sickle cell anemia?

5. Explain the purpose of the following treatments used for patients with sickle cell.
Penicillin-

Folic Acid-

Blood Transfusion-

Bone Marrow Transplant-

6. Summarize what you have learned about the CAUSE of sickle cell anemia using the following terms:
   oxygen, chromosome 11, hemoglobin, mutation, protein, red blood cells, gene, concave shape, body organs.

Check out the site below for some cool visuals on what a cell looks like in a person who has sickle cell. This site also explains the terms dominant and recessive with respect to inheritance.

http://learn.genetics.utah.edu/content/inheritance/patterns/