

ACTIVITY 1: SET THE CONTEXT

Directions: Listen and follow along as your teacher reads the text and reviews the images. Work individually or with a partner to answer the question. Then, debrief as a class.

In this session, we will be exploring the inheritance of a disease called sickle cell anemia. *Inheritance is the way a trait is passed from a parent to a child.*


→ **inherited:** receive through genetics from a parent

Sickle Cell Anemia

Sickle cell anemia changes the shape of the blood cells in a person's body.


Normal Blood Cell

- Round
- Looks like a donut




"Sickled" Blood Cell

- Curved
- Looks like a banana



Why is it called "sickle" cell?



A sickle is a tool used for farming. A sickle has a sharp, curved blade and short handle. Sickled blood cells look like the blade of this curved tool.

Sickled blood cells can pile up in the veins and arteries in a person's body. *Veins and arteries are tubes in the body that carry blood around a person's body.*

Piles of sickled blood cells can block veins or arteries and stop blood from *flowing* (moving through).

The piled up blood cells can cause *dangerous* (harmful) and painful things, like a heart attack or a stroke.

1. What can happen to sickled blood cells in the body?

Sickled blood cells can _____ up in the veins and arteries and stop _____ from flowing.

