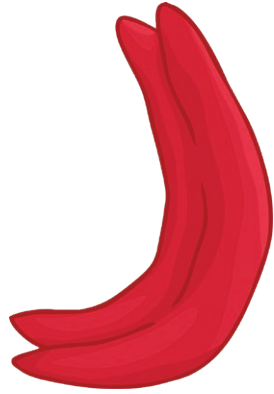


A healthy red blood cell

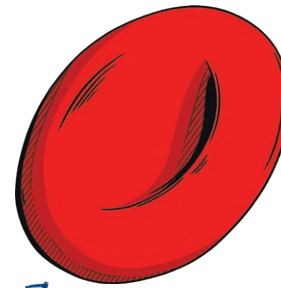


A red blood cell affected by sickle cell disease

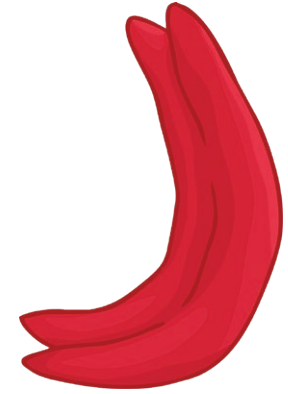
Use what you know about red blood cells to discuss how the unusual shape might affect a person who has sickle cell disease.

Useful information:

- Red blood cells usually look like round discs.
- People affected with sickle cell disease produce 'crescent moon' or 'sickle' shaped red blood cells. A sickle is an old farm tool.
- A round disc is a good shape for red blood cells because they can move easily through the blood vessels.



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Reasoning Card ②

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Example answer:

Answers should refer to the round disc being the best shape and the sickle cell being an inferior shape. Children should be able to recall that red blood cells carry oxygen around the body.

A sickle cell shape means it cannot carry as much oxygen. Reference to sufferers of sickle cell being short of breath.

Sickle cells are not a good shape to fit through capillaries because they get stuck and this affects how the red blood cells can flow and transport oxygen around the body.

People with sickle cell disease don't have enough round red blood cells and so their daily activities can be affected, they may get tired a lot, they might not grow as quickly, etc.