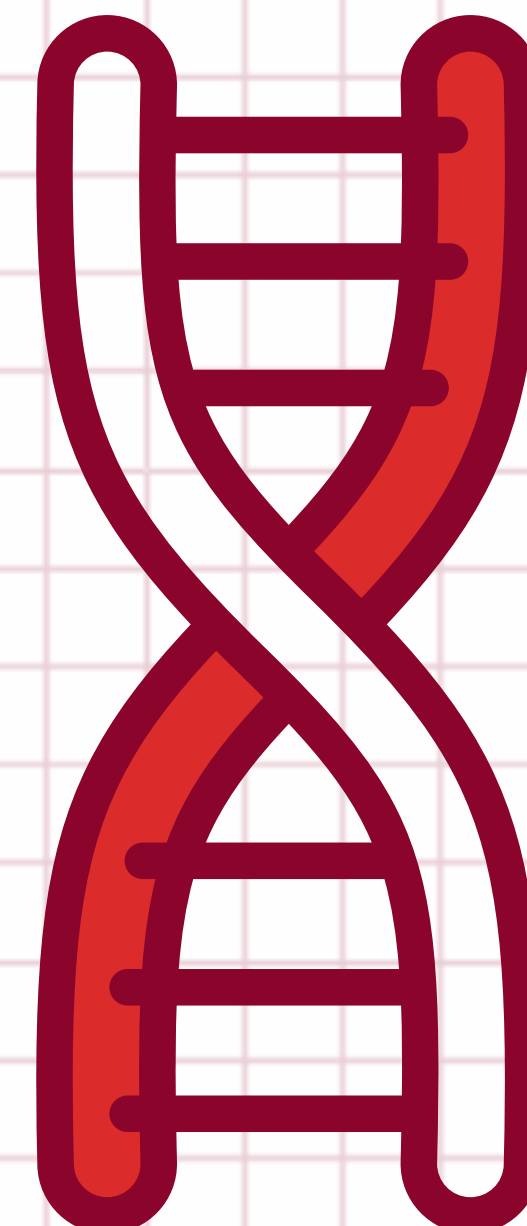


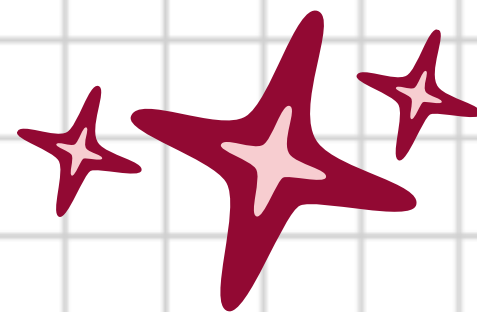


Bitesize sessions

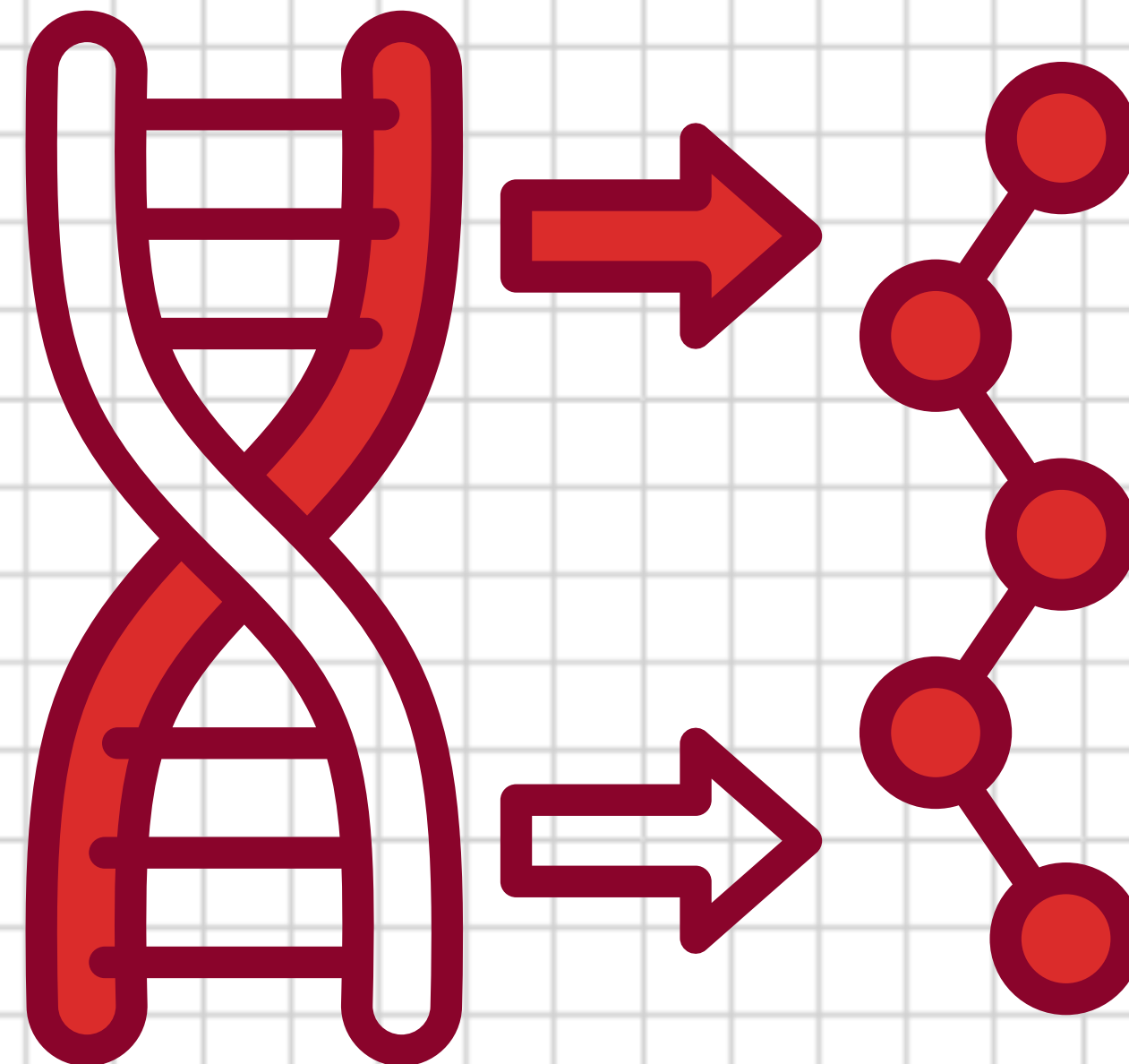
# WHAT IS SICKLE CELL TRAIT?



# GENES

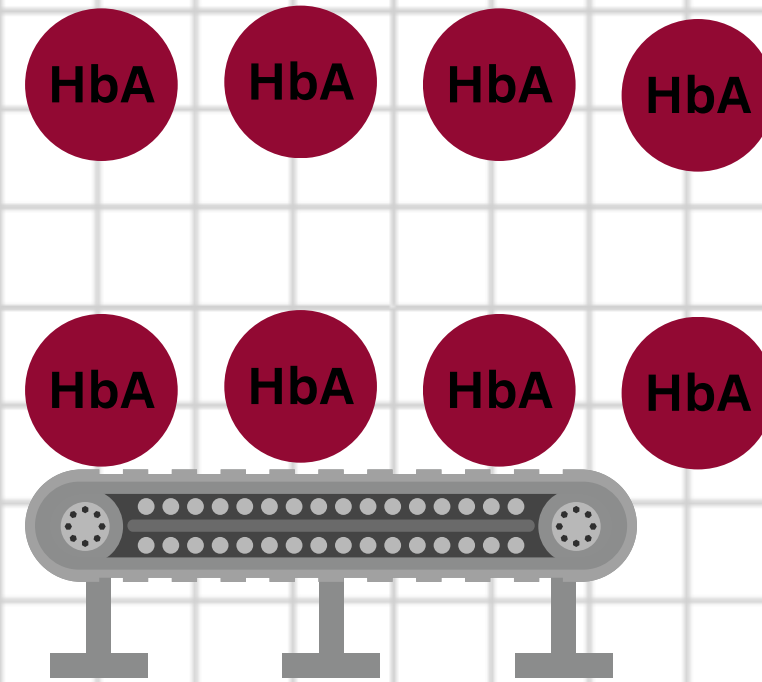
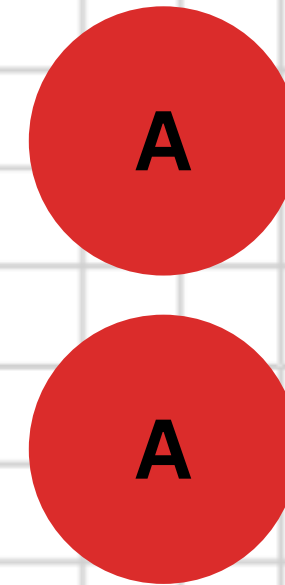
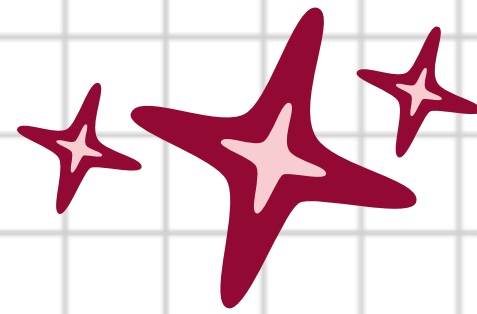


- We all have genes - these are tiny codes which make up the DNA.
- Genes allow the body to build all of the things which allow it to function normally.
- Some people have slightly different genes to usual. Sometimes these can cause disease depending on how it is inherited.

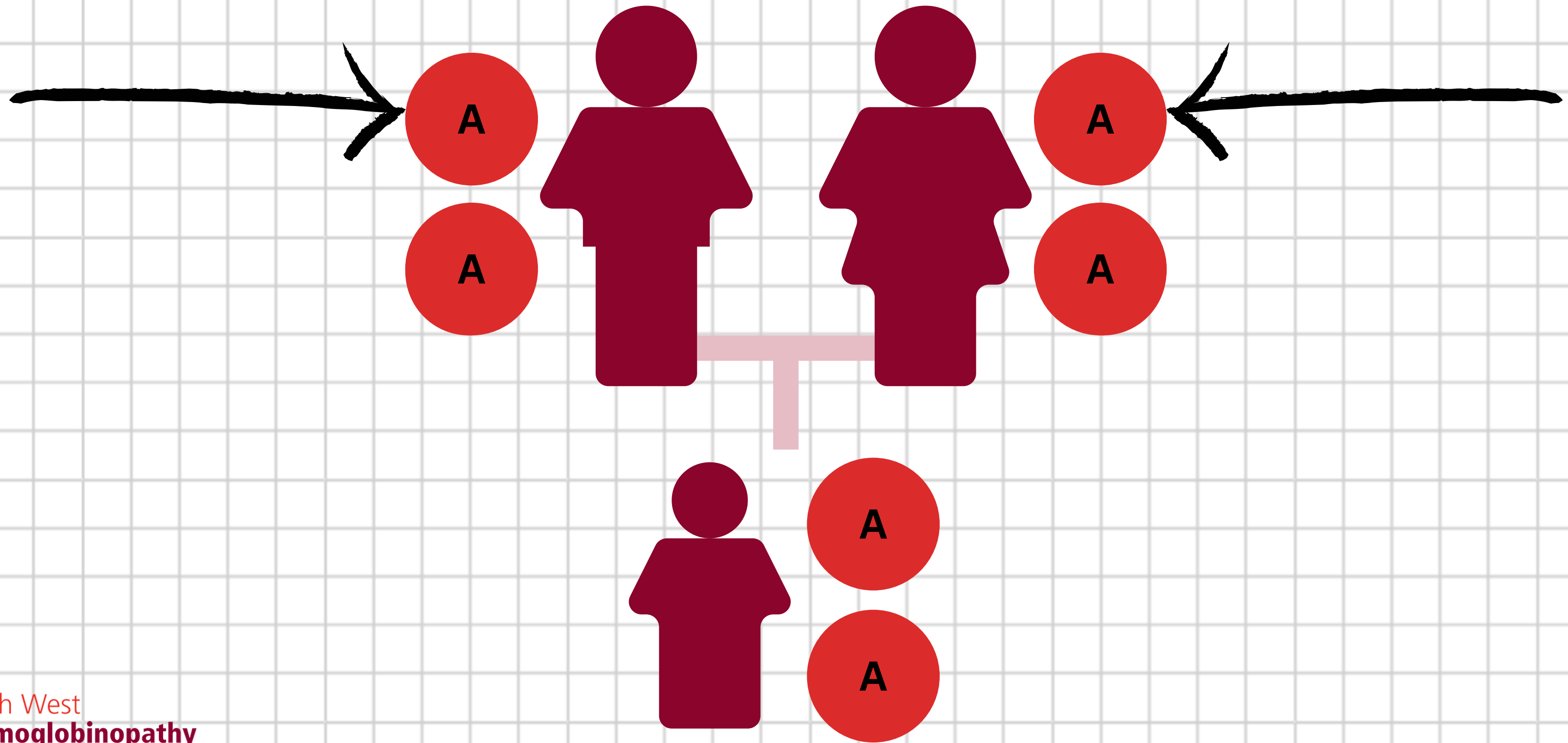


# RED CELLS

- Red cells are blood cells which travel around the body in the blood stream
- They are filled with proteins called haemoglobin which carry the oxygen
- Haemoglobin is made by the two genes which are inherited - one from each parent
- Most people have the same kind of haemoglobin - HbA.

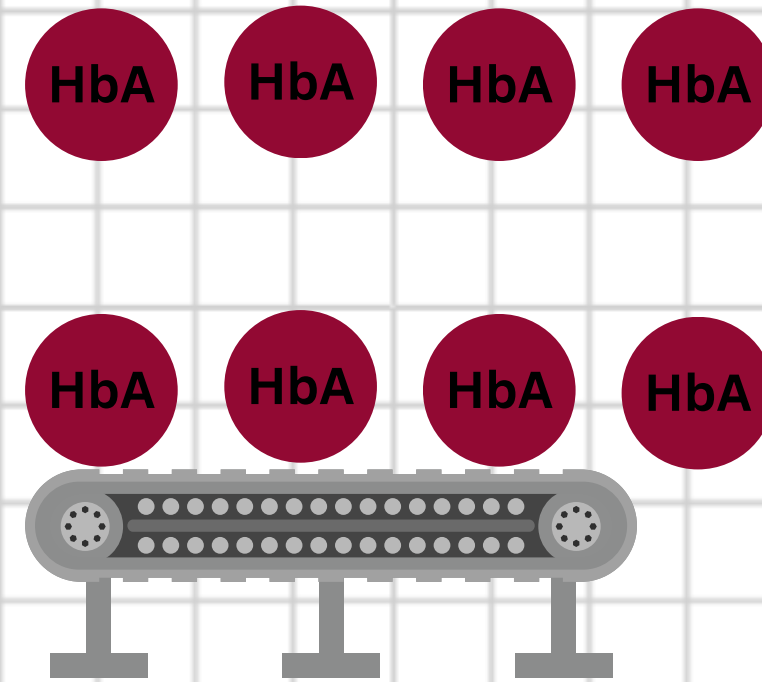
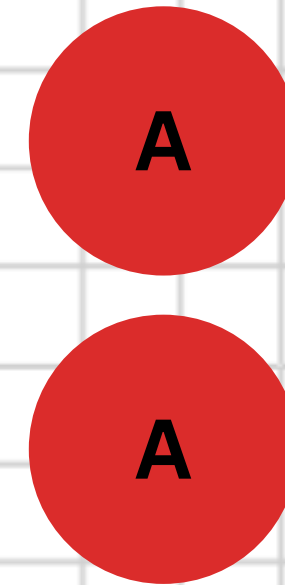
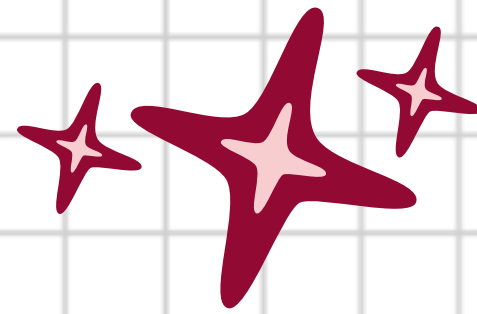


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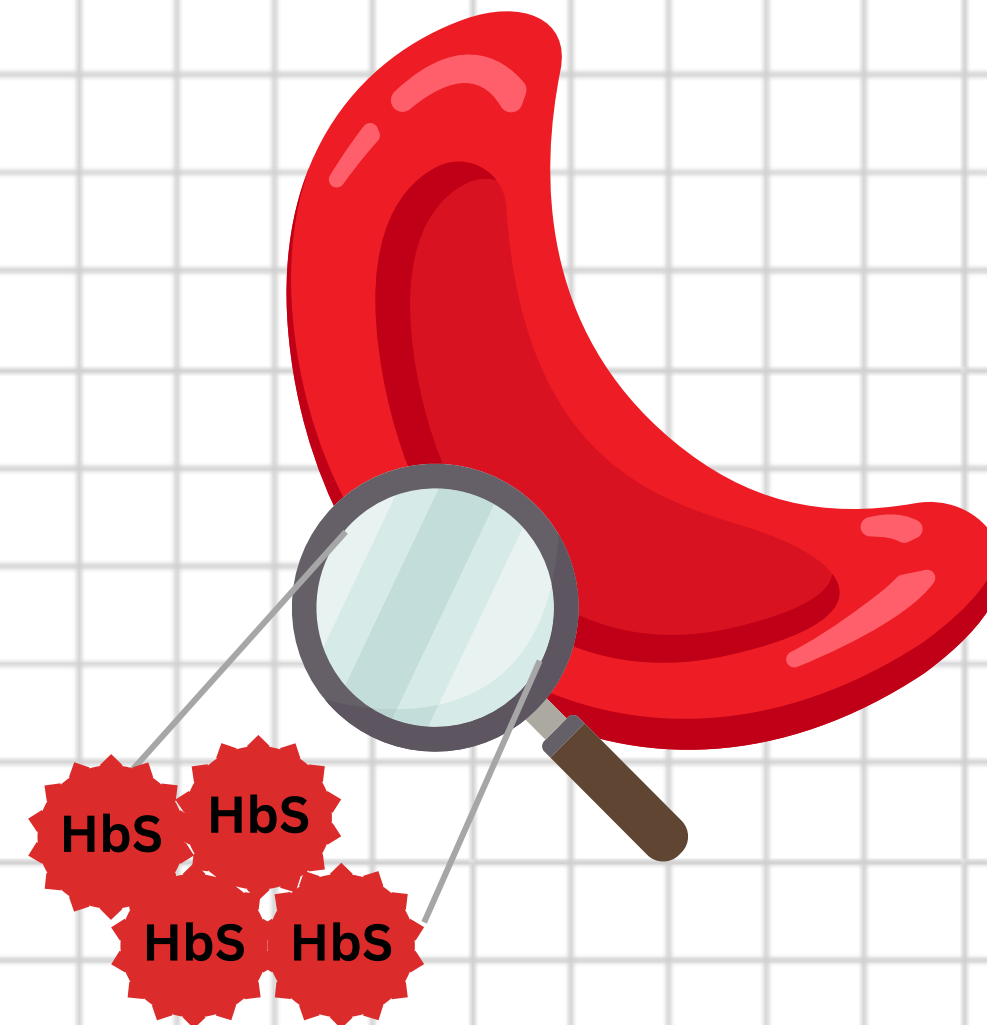
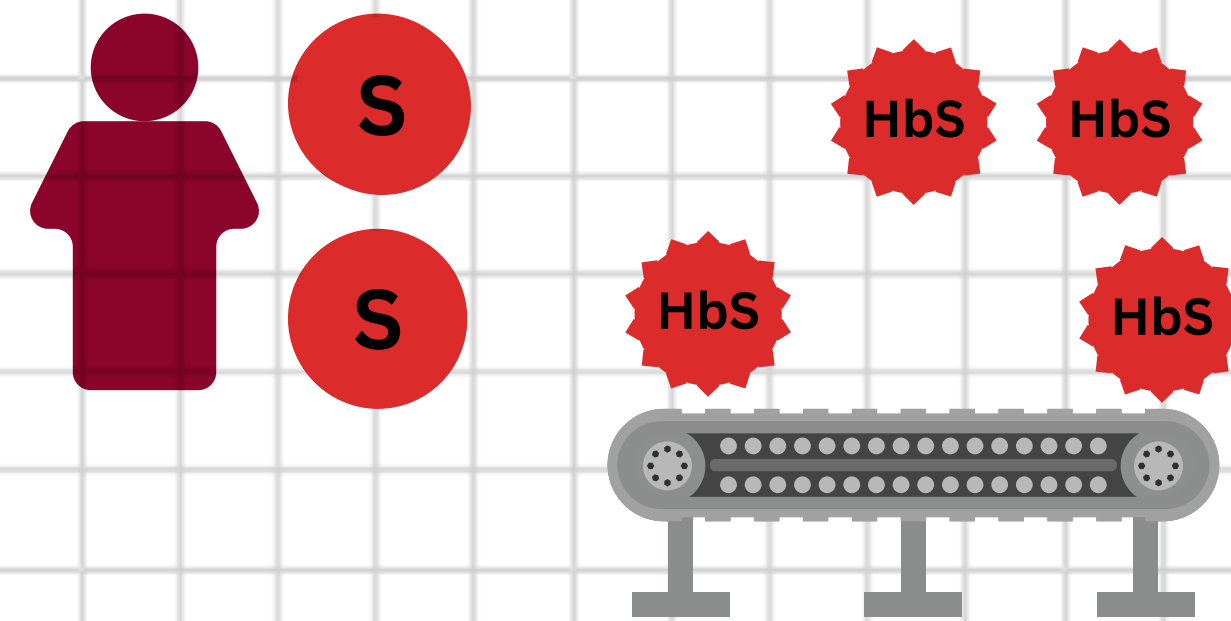
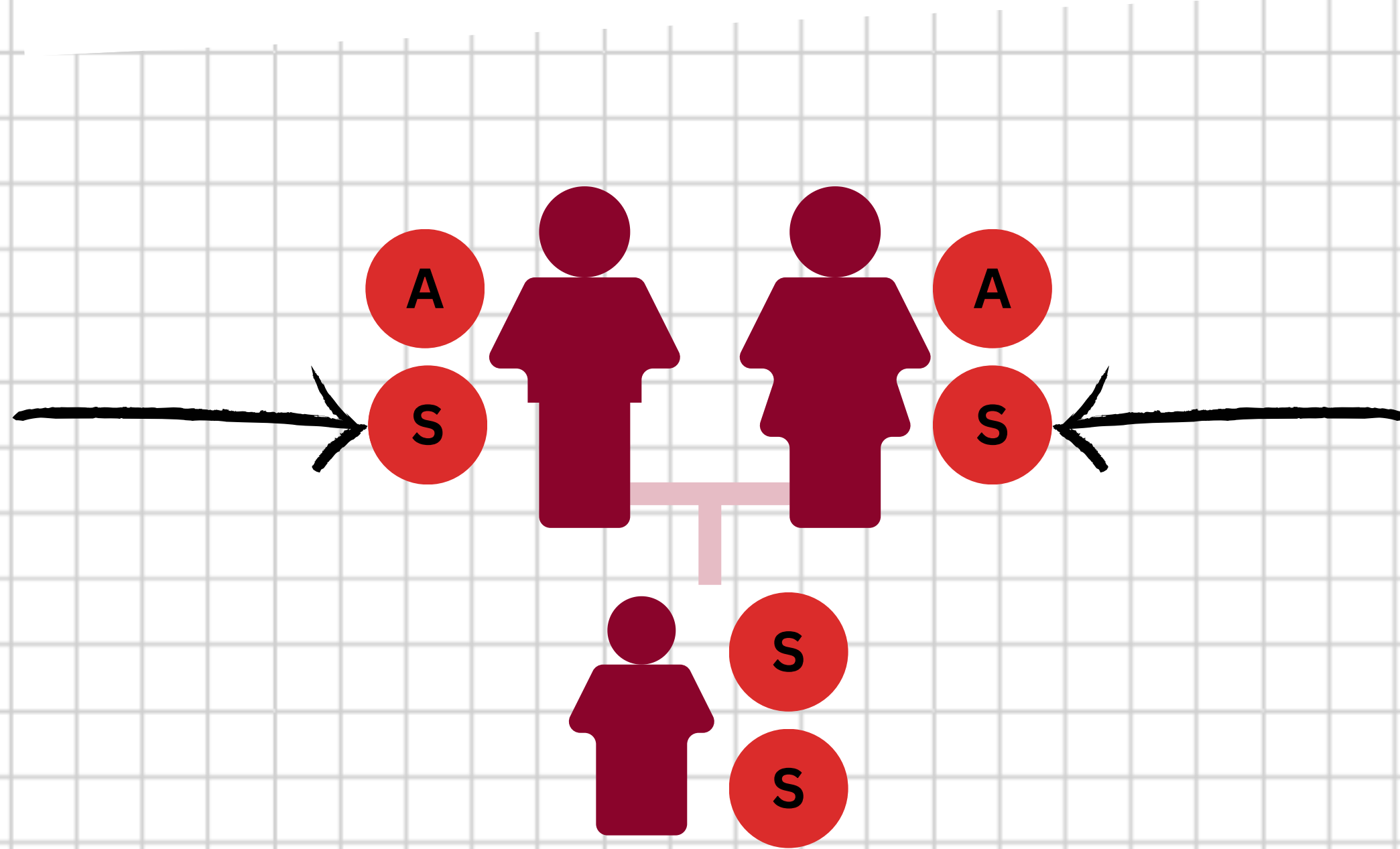


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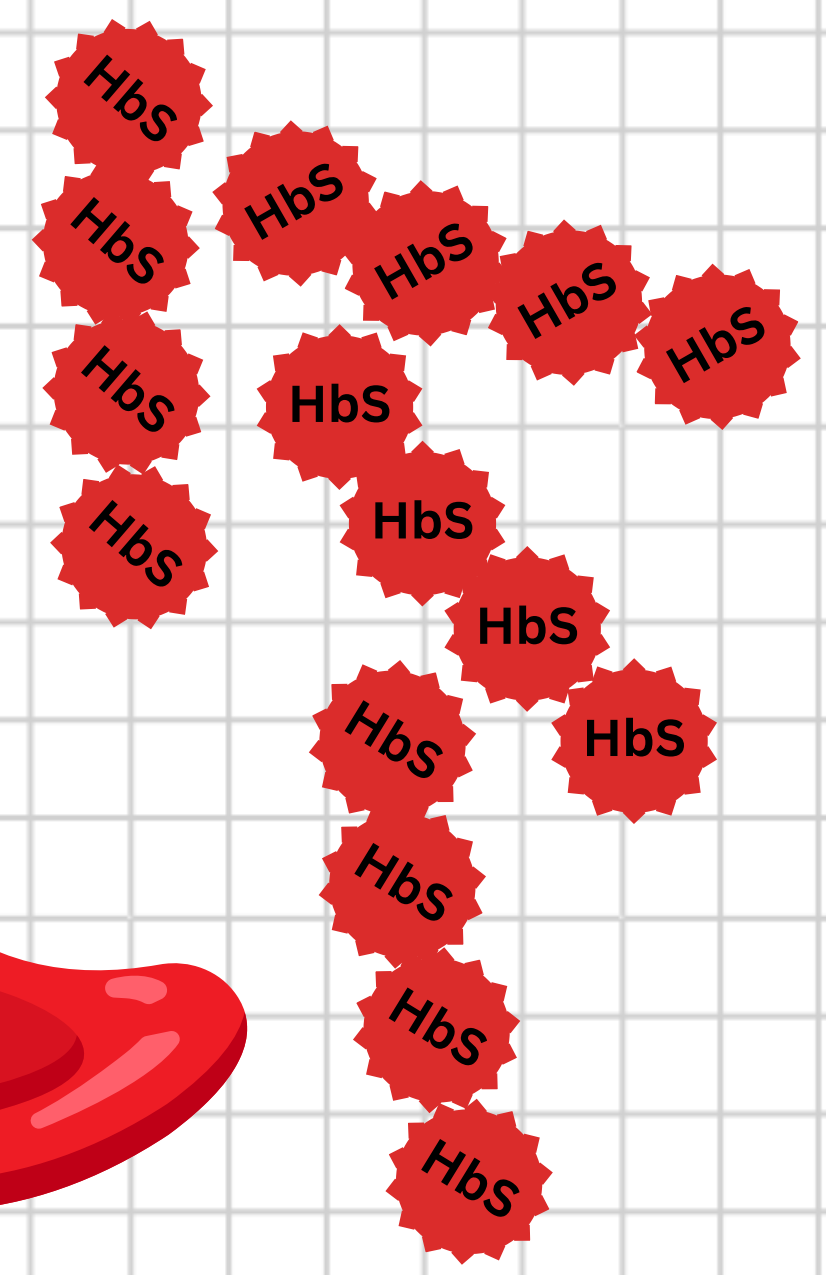
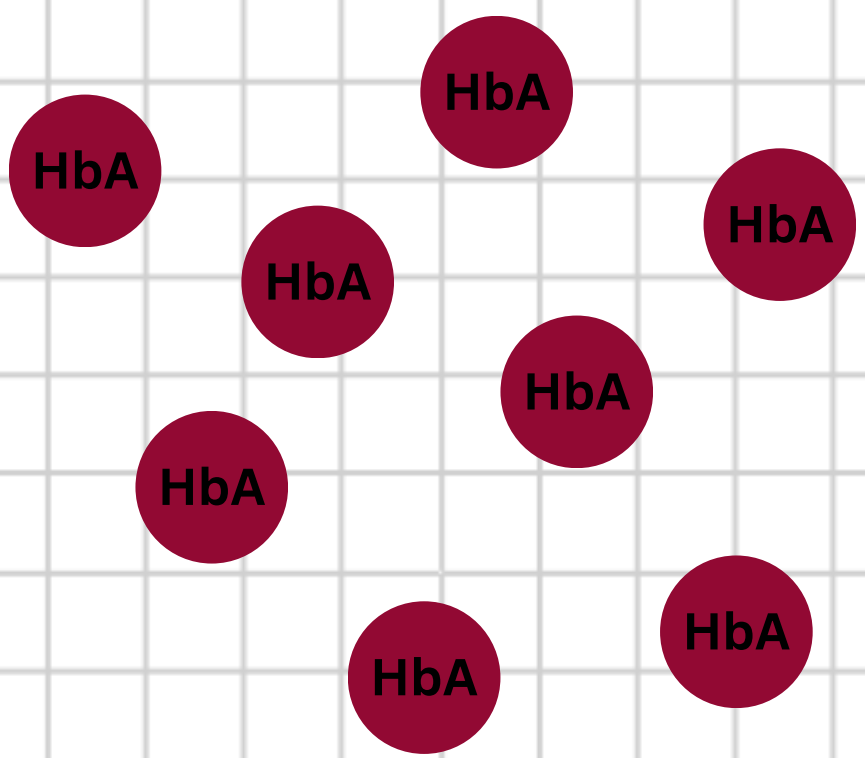
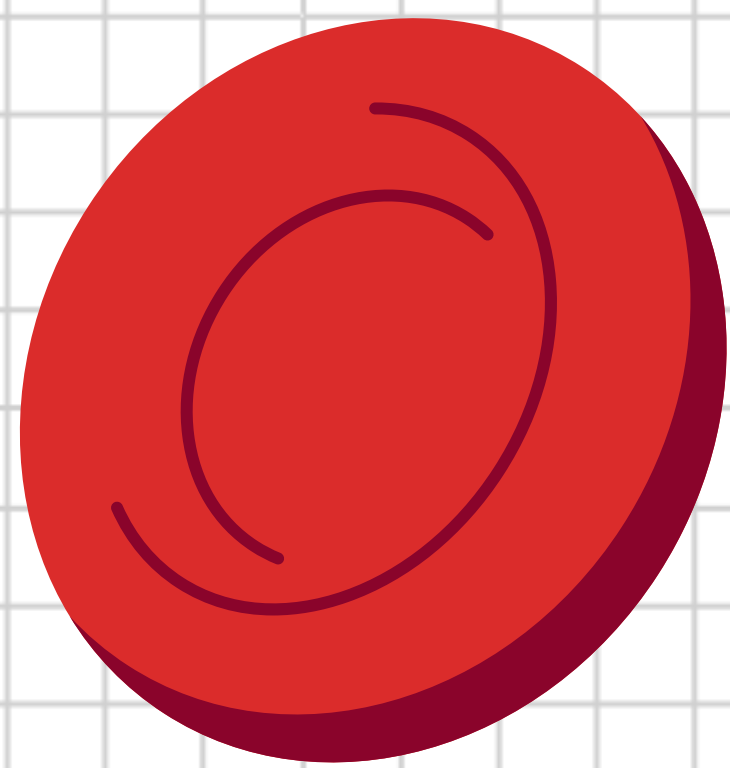


# SICKLE CELL ANAEMIA

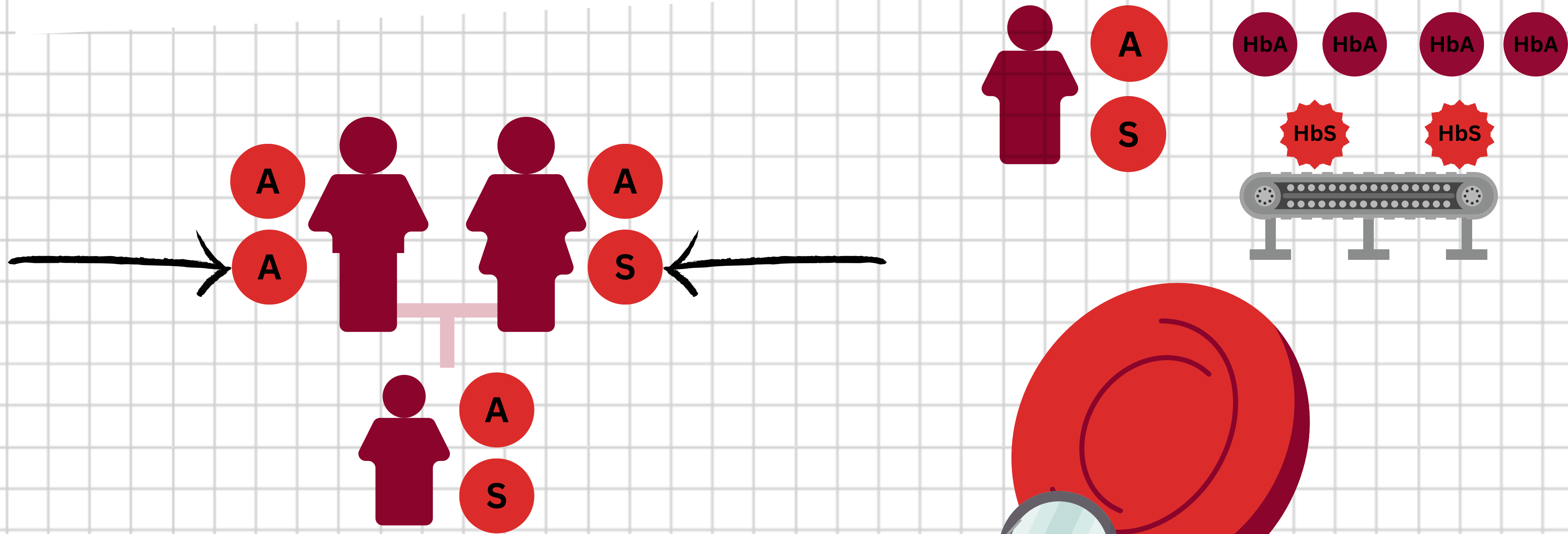


# SICKLE CELL ANAEMIA

## WHY DO CELLS SICKLE?

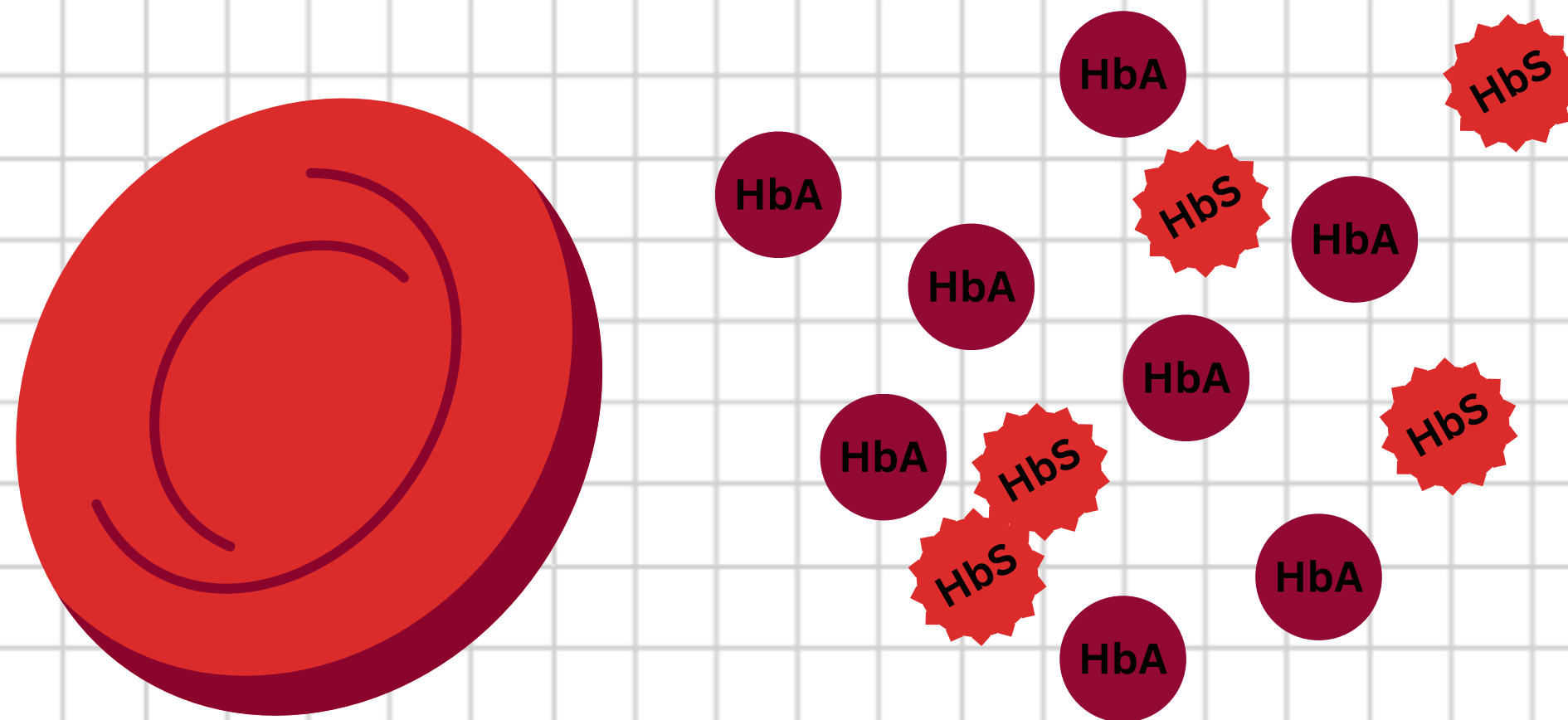


# SICKLE CELL TRAIT



# SICKLE CELL TRAIT

## WHY DON'T THESE CELLS SICKLE?



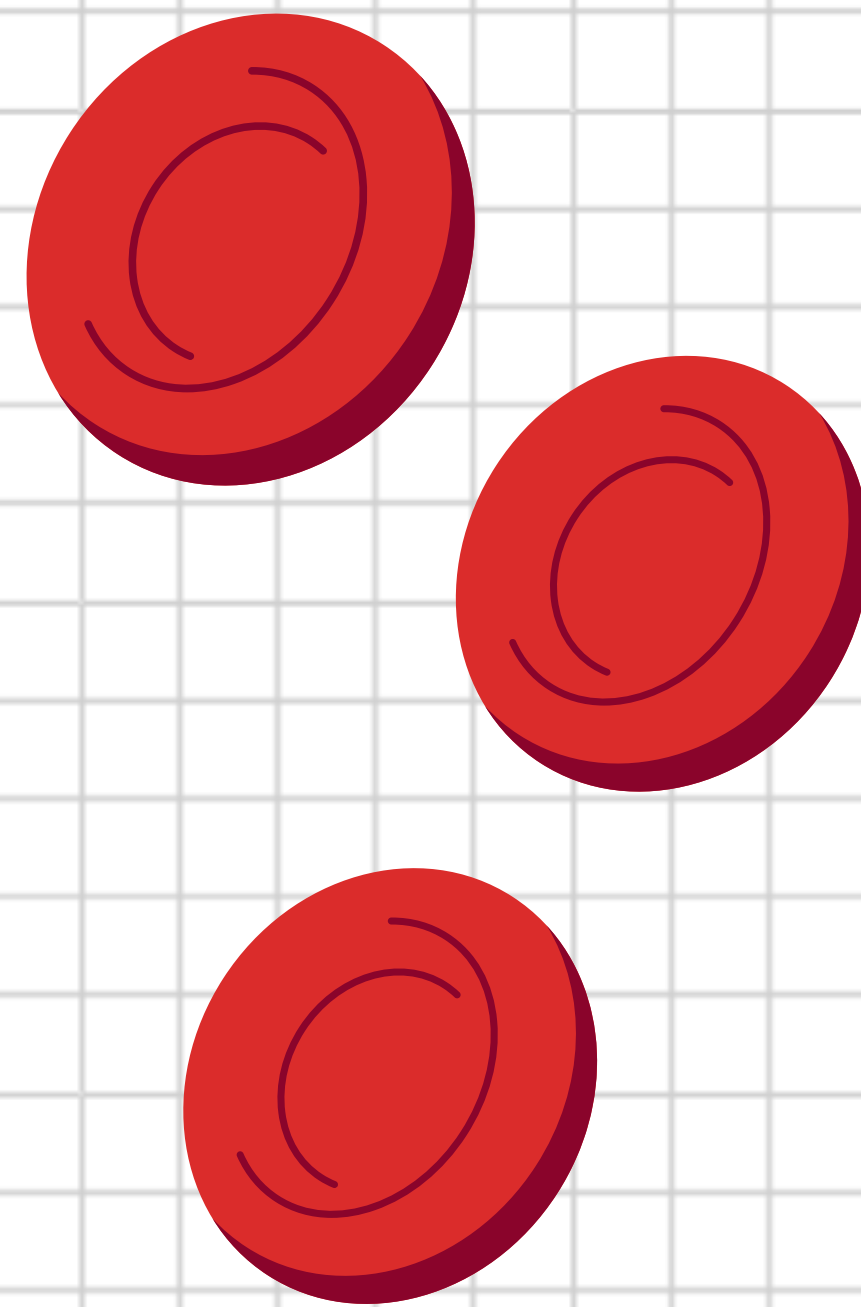
**70% HbA**  
**30% HbS**

**This keeps the cells round and healthy**



# THANK YOU FOR LISTENING!

Check out the next video in the series - what you need to know if you have sickle cell trait



South West  
Haemoglobinopathy  
Coordinating Centre

**TALK TO GP DISCLAIMERS - ADVICE NOT  
MEDICAL RESPONSIBILITY**