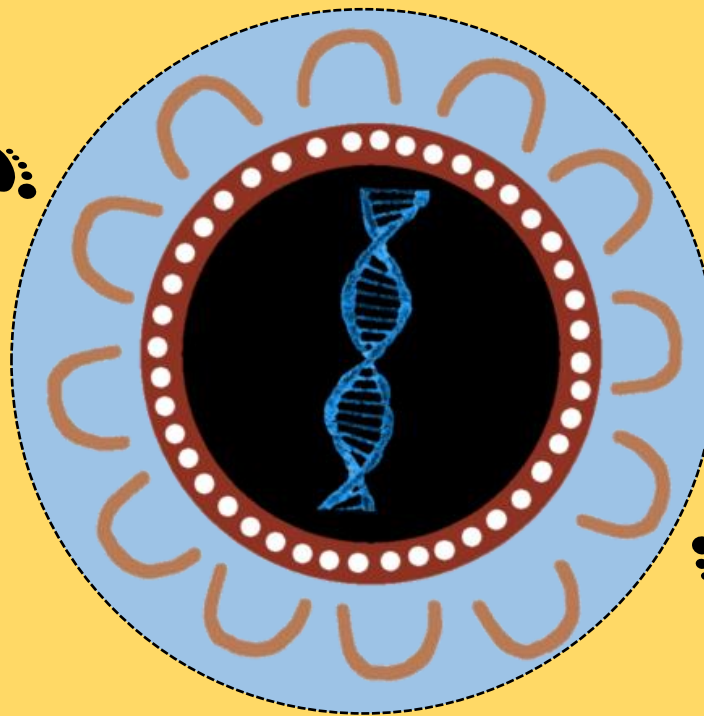



Aboriginal and Torres Strait Islander Genetics Information Booklet



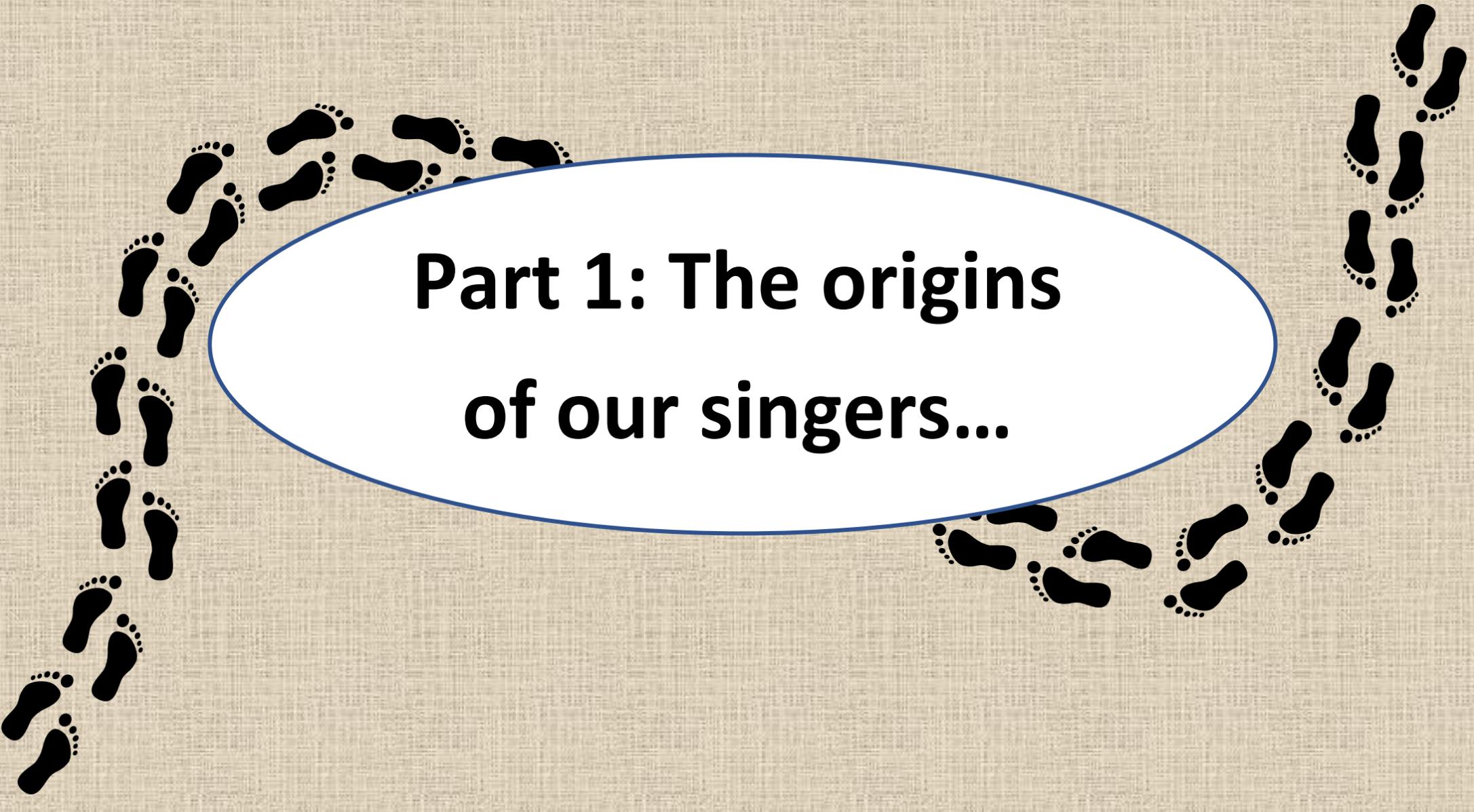
GENETIC SERVICES
OF WESTERN AUSTRALIA

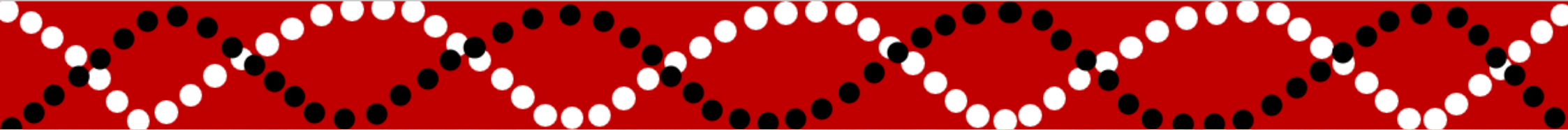
The background features a rich Aboriginal art style. At the top and bottom are horizontal bands of red with black and white dot patterns. The central area has a brown background with a repeating pattern of small white dots. Overlaid on this are several circular motifs: some with concentric rings of black and white dots, and others with wavy lines in red, yellow, and black. Two prominent circular emblems are positioned on the left and right. The left emblem is green with a blue horizontal band containing a white silhouette of a person with arms raised and a star. The right emblem is a semi-circle with a black top half, a red bottom half, and a yellow center. A large white circle in the center contains the main text.

**This flip booklet has been
created to help Aboriginal and
Torres Strait Islander
individuals and families
navigate their health journeys
with Genetic Services of
Western Australia.**

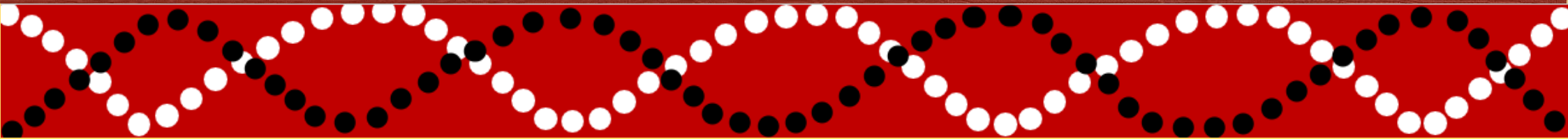


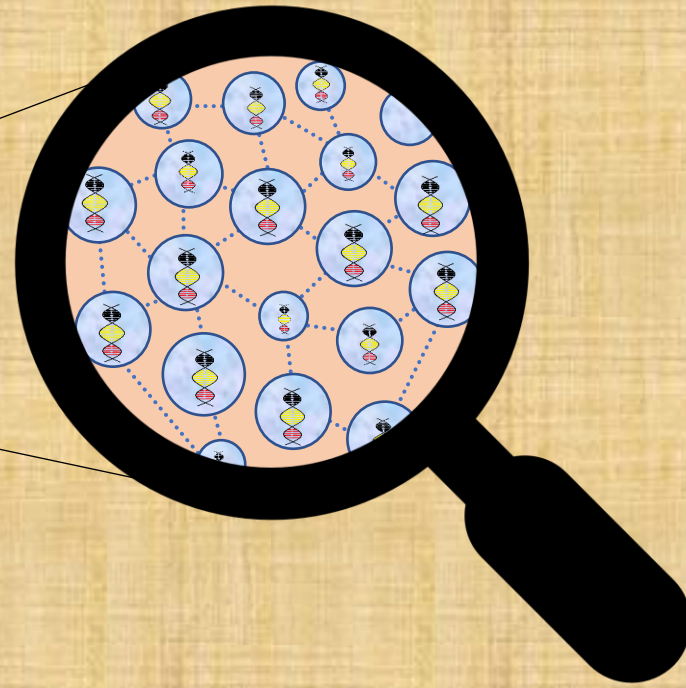
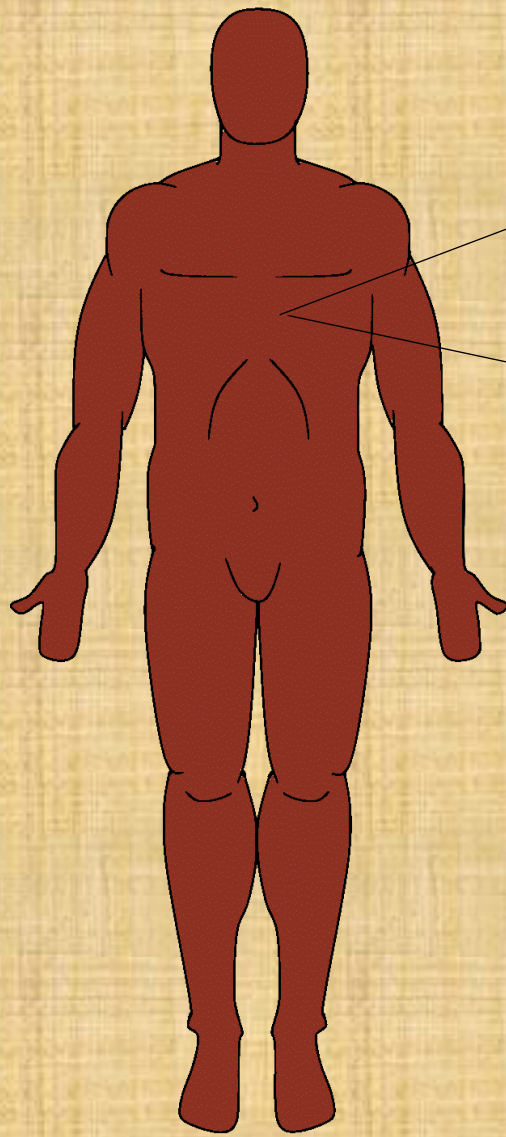
**Part 1: The origins
of our singers...**





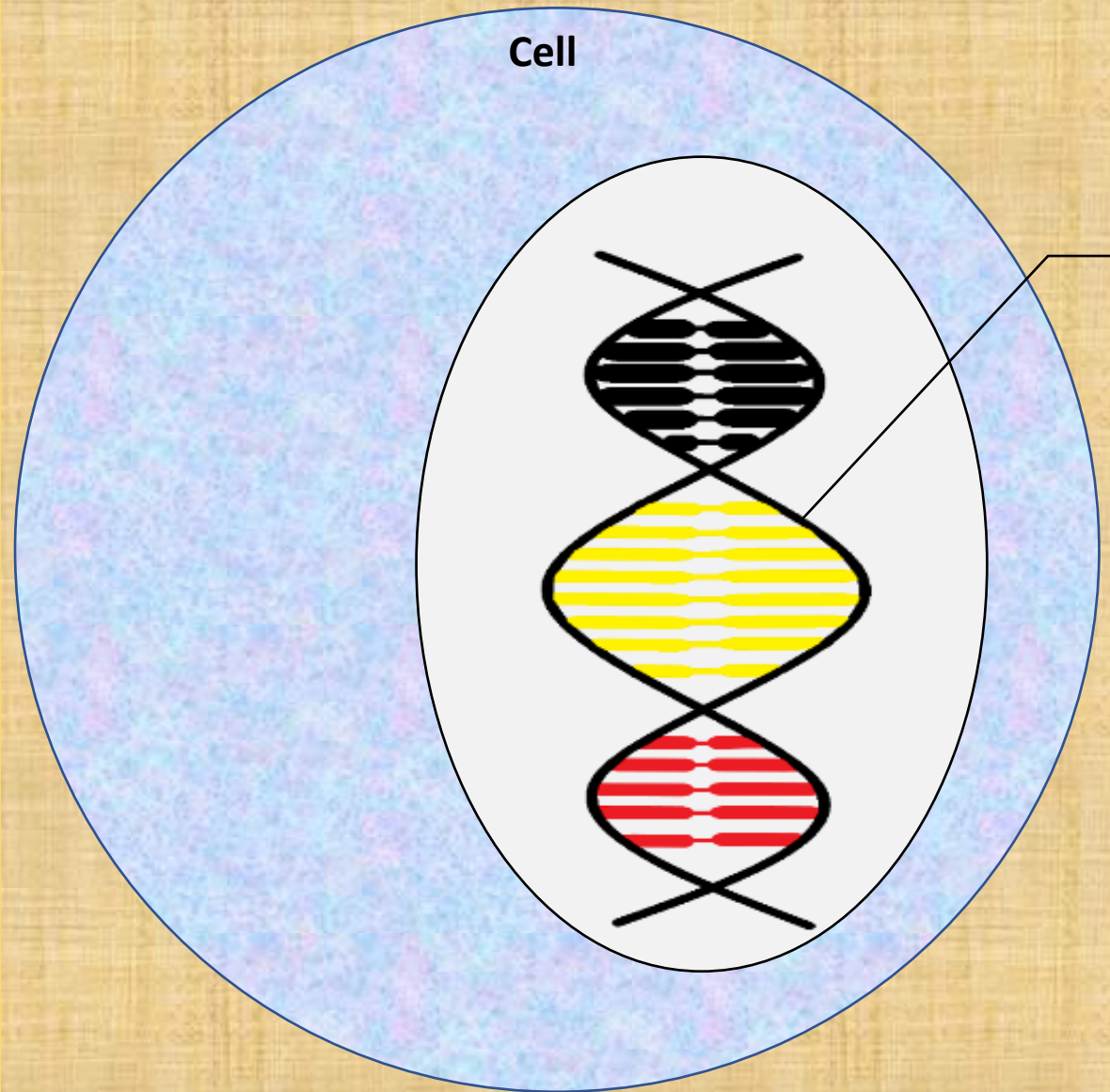
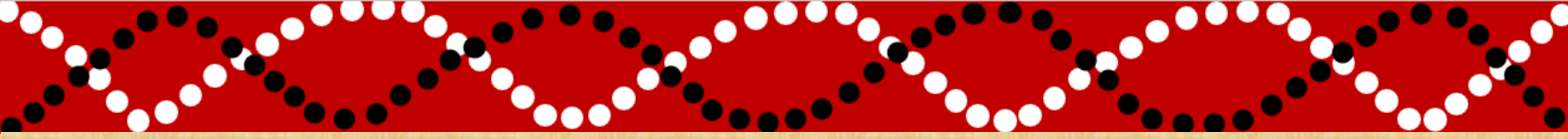
Our families are made to be strong and healthy from the **songs** sung in the body. This flipbook has been created to try help explain our **DNA story**. To do this, we must first take a closer look...





Although we can NOT see it with our own eyes, microscopes show that our body is made up of something very small called

cells.

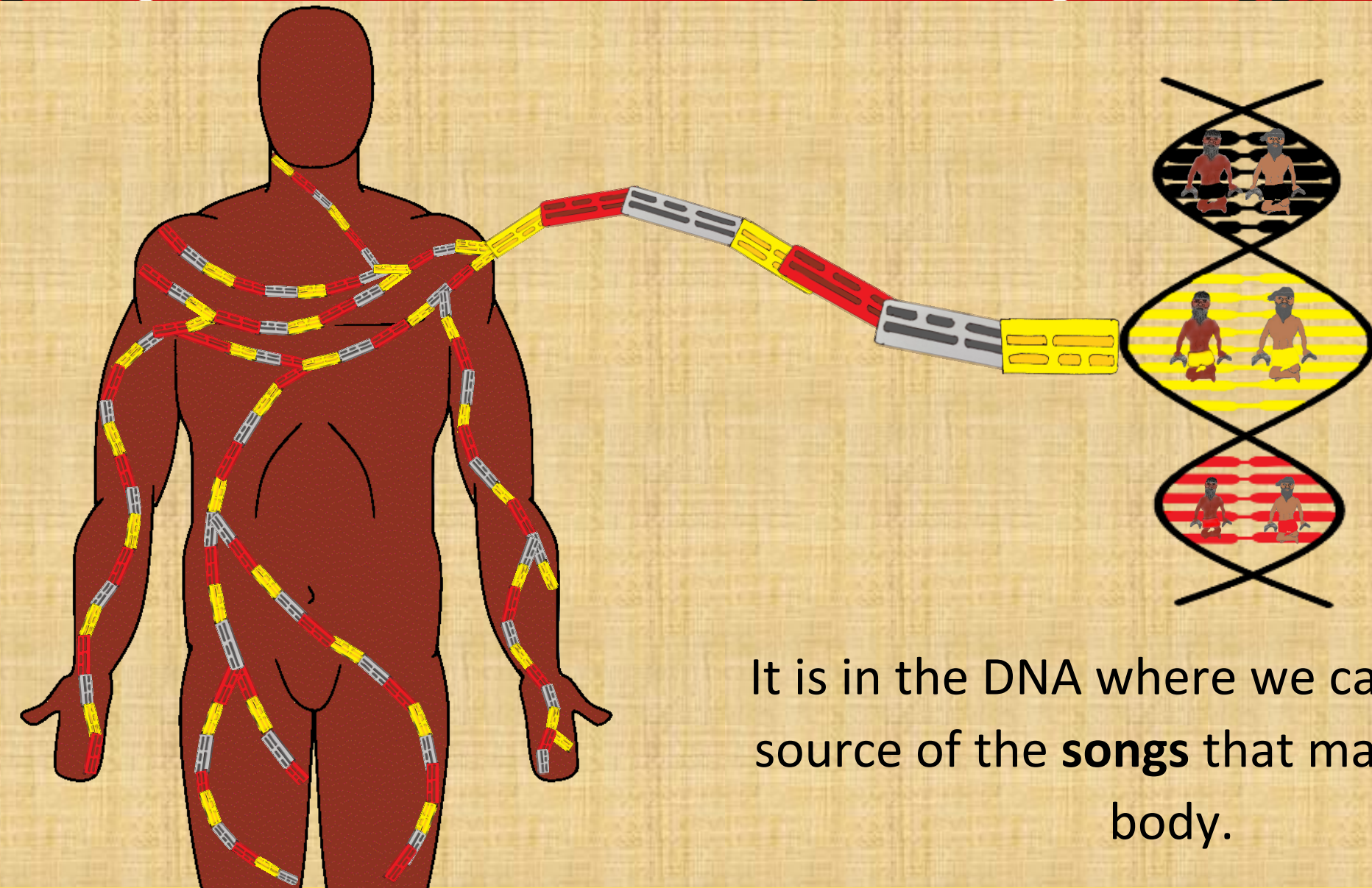
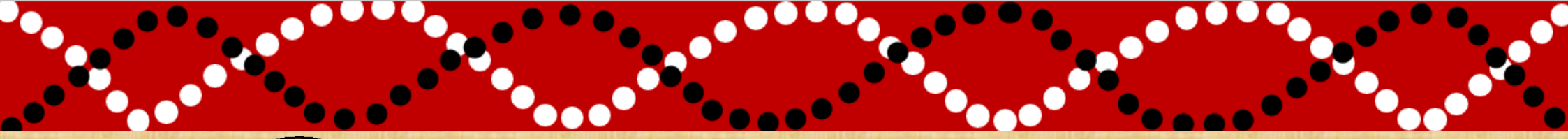


Cell

When we look even closer
at one of these cells, we
can see it holds something
called:

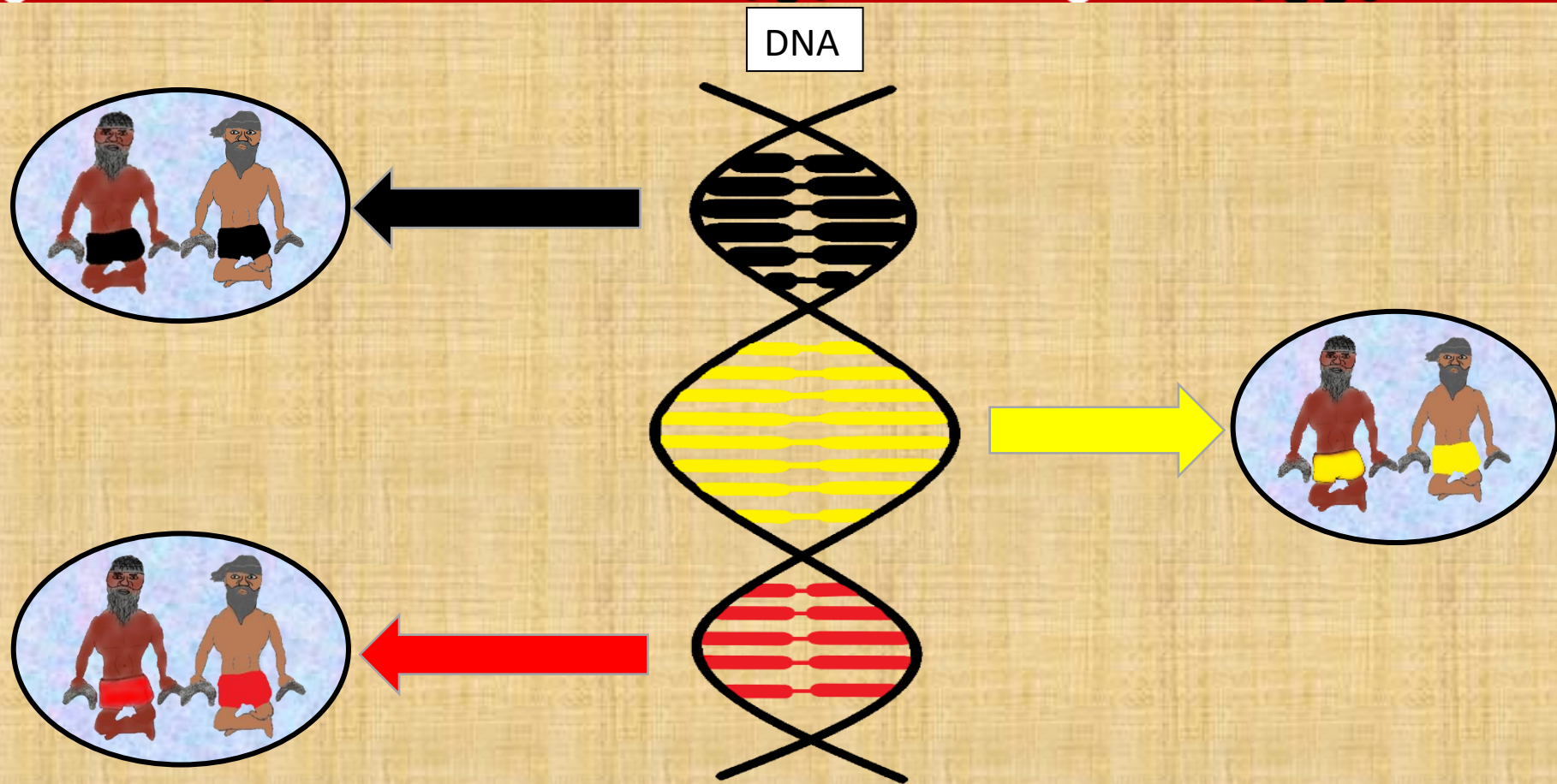
DNA



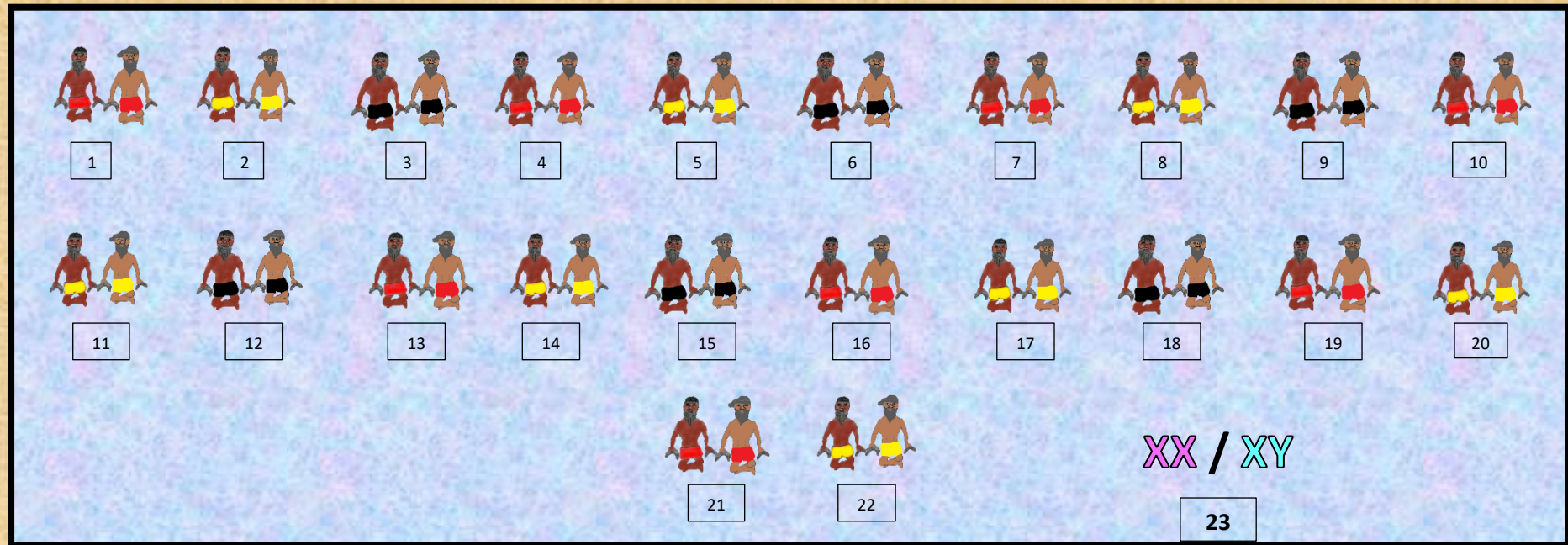


It is in the DNA where we can find the source of the **songs** that make up our body.

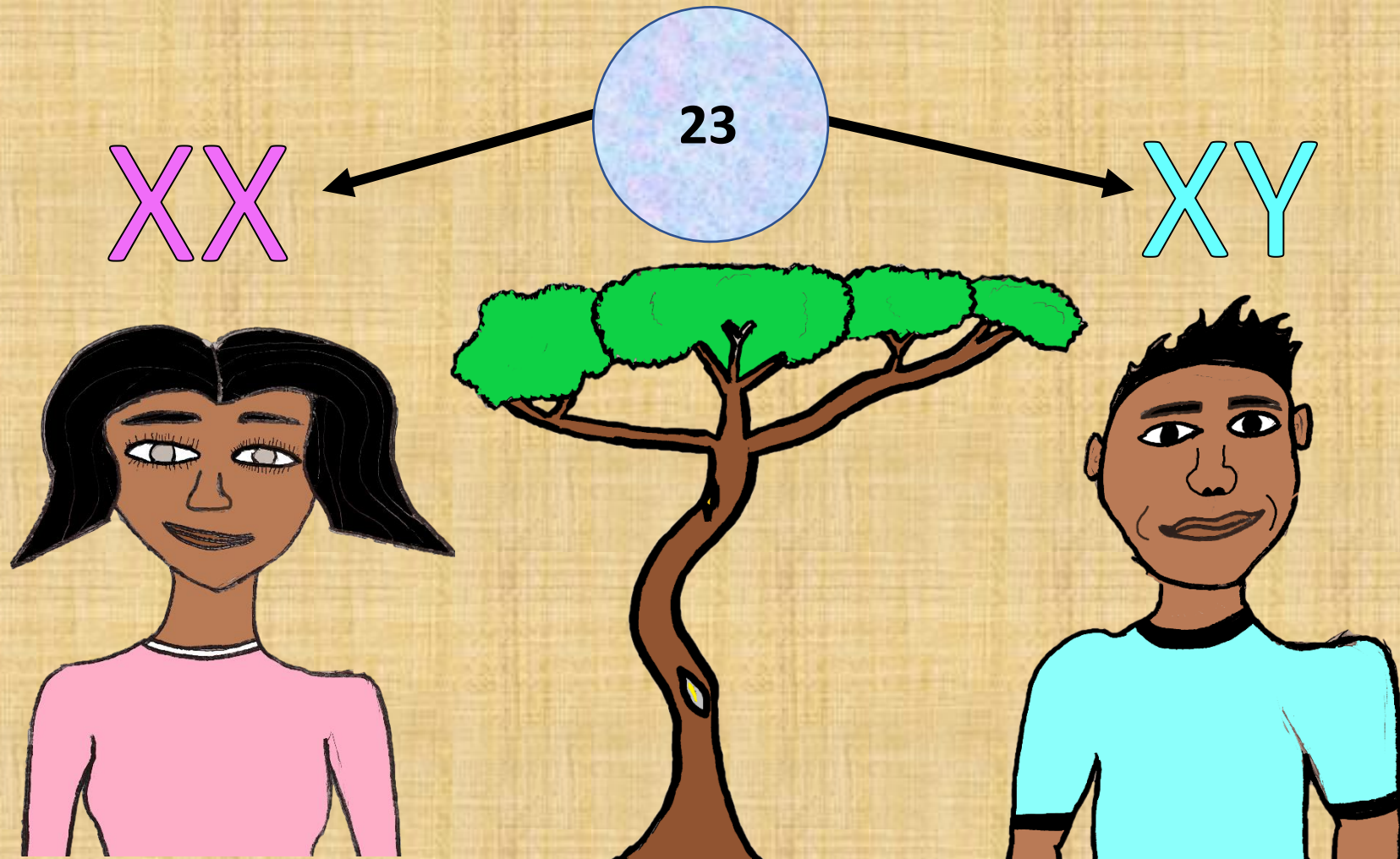




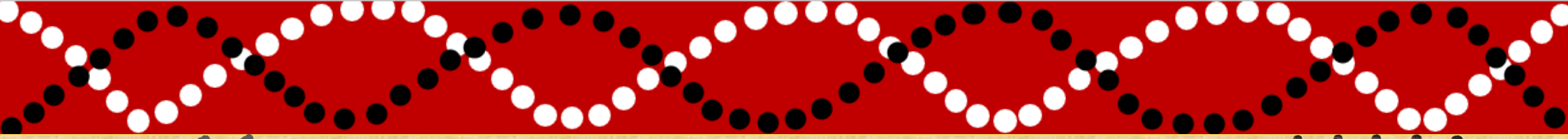
In the DNA we find singing groups called **Chromosomes**.
These groups usually come with two singers that sit together.



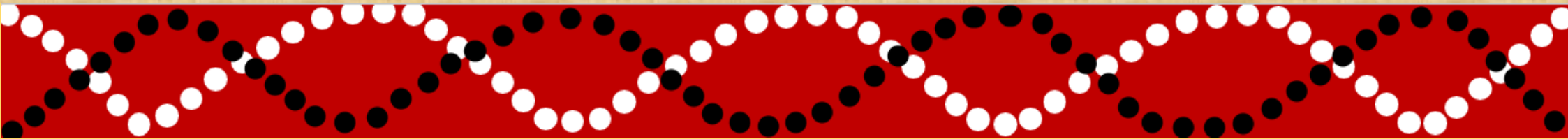
The singers are organised and sing for the body when we are born and throughout different stages of our life. There are **23 singing groups** in each cell with a total of **46 singers**.



The 23rd chromosome is the sex chromosome that can help determine if we are born a Woman: XX or a Man: XY.

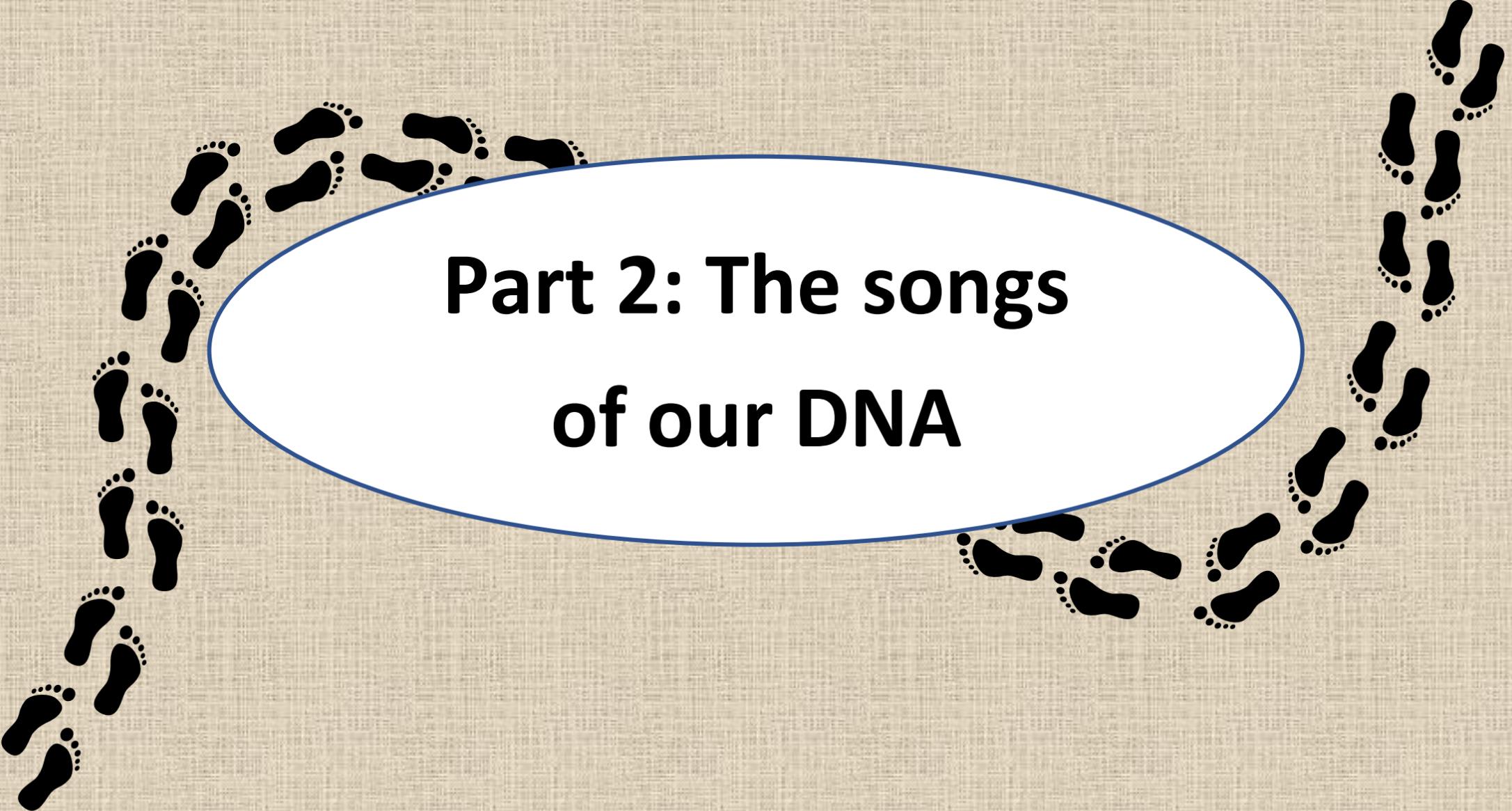


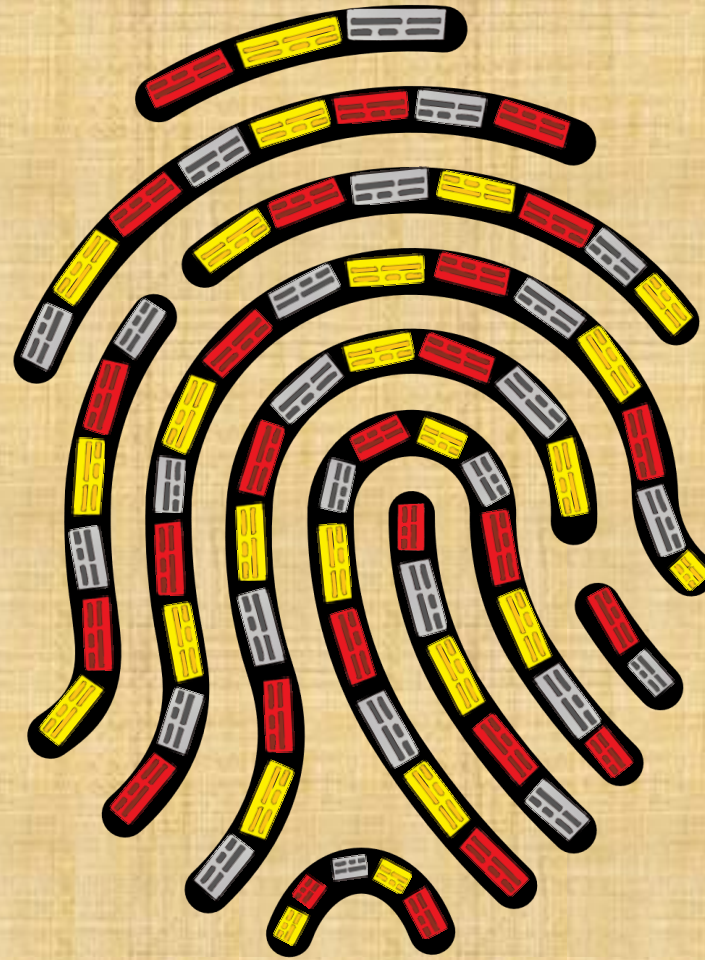
Half of the singers come from the mother and the other half come from the father for each generation. These singers are important to help us to grow and be healthy.



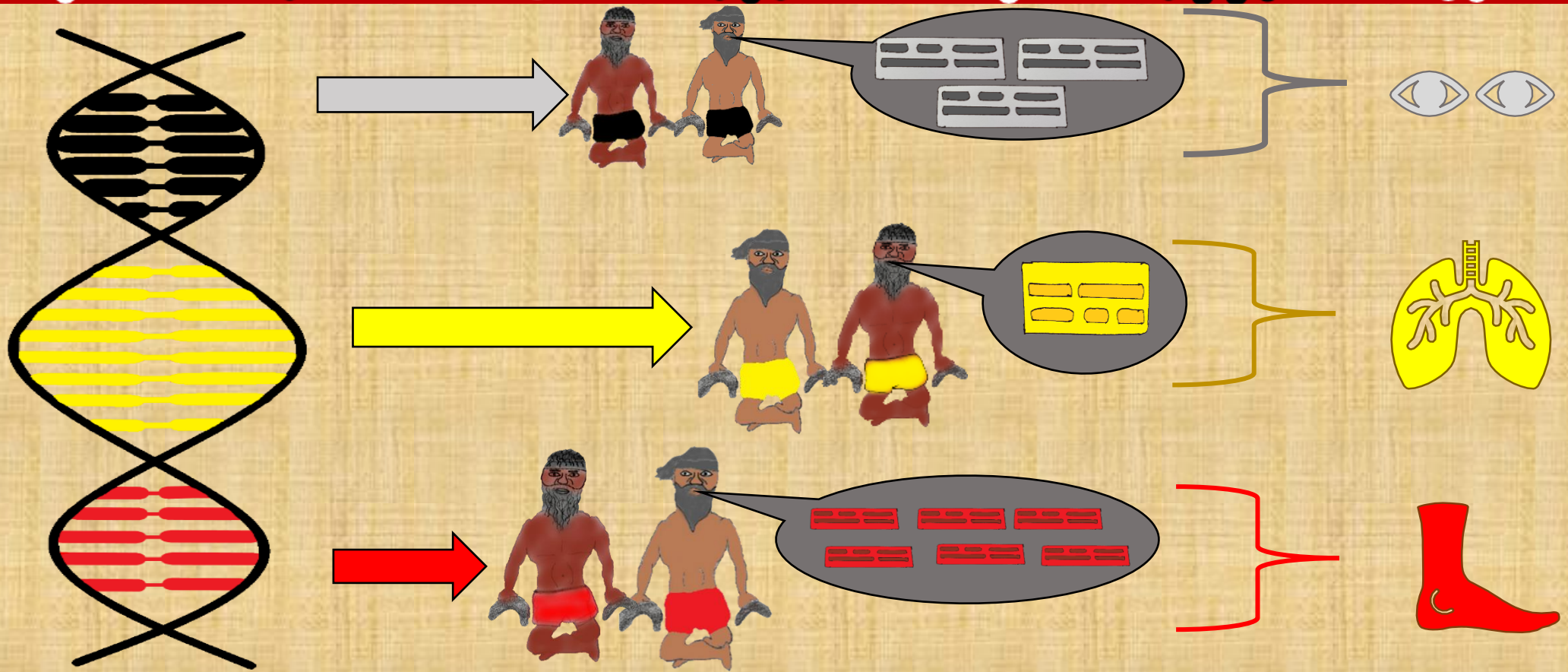


**Part 2: The songs
of our DNA**

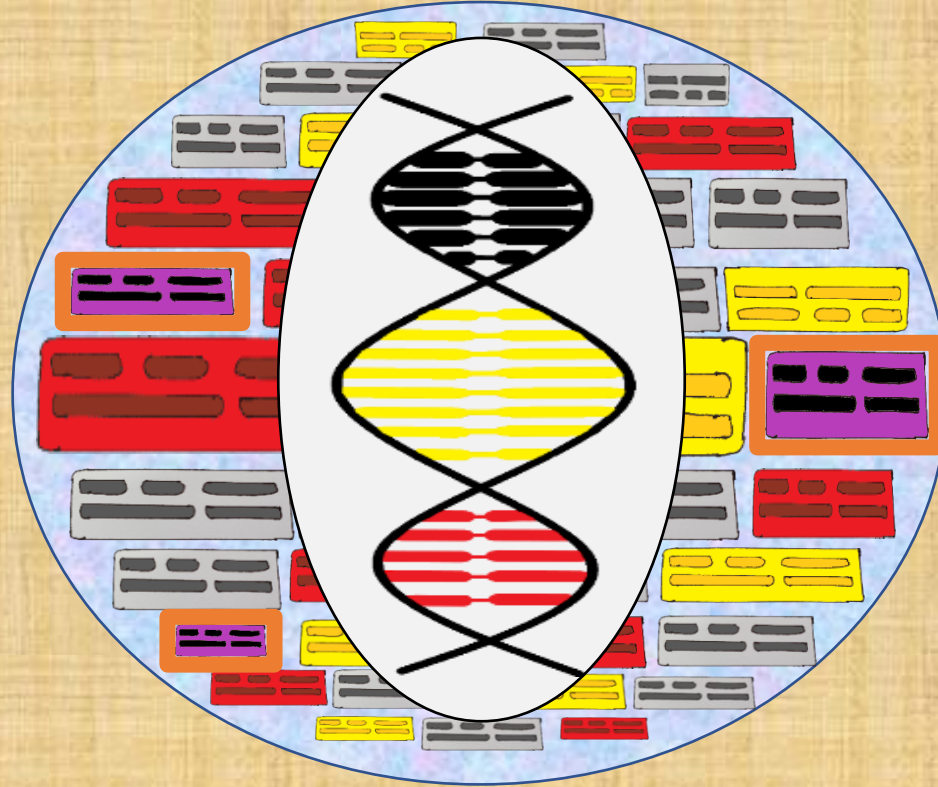




Each DNA singing group have their own songs called **Genes**. There are over 20,000 songs that are slightly different in all of us.



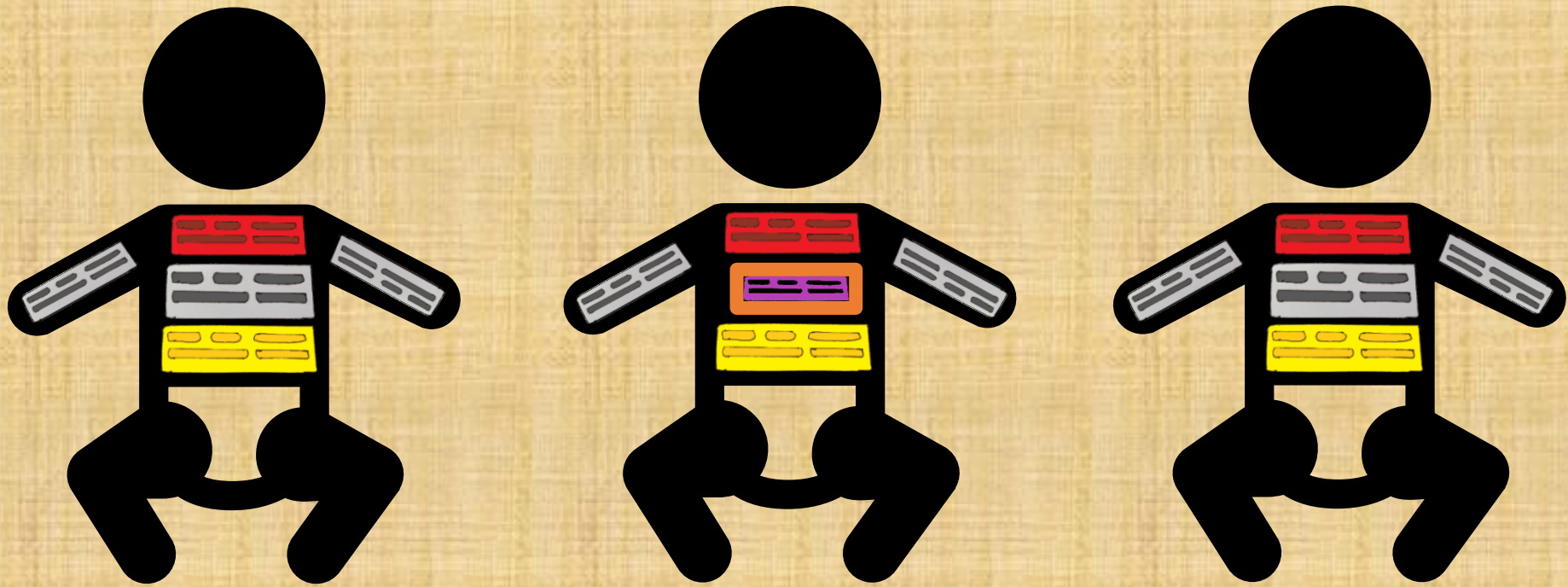
The 23 singing groups (Chromosomes) have different songs (Genes) to sing for different parts of the body. Some songs are long whilst others are short.



Of the ~20,000 songs (genes) throughout the body, there some are important for our health and others that are not. When we have variation in the songs that effects our health, we call this a **mutation**.

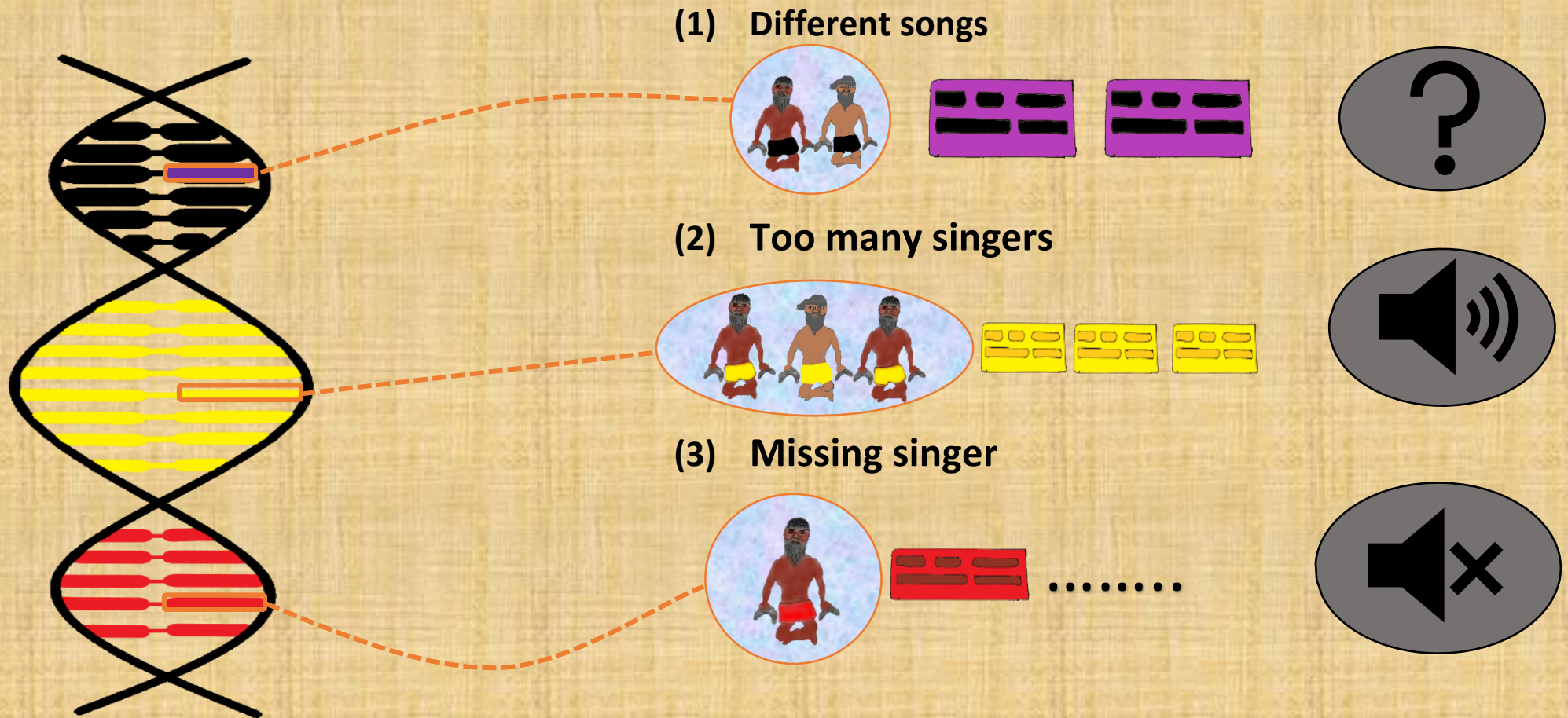


Part 3: Songs and Health

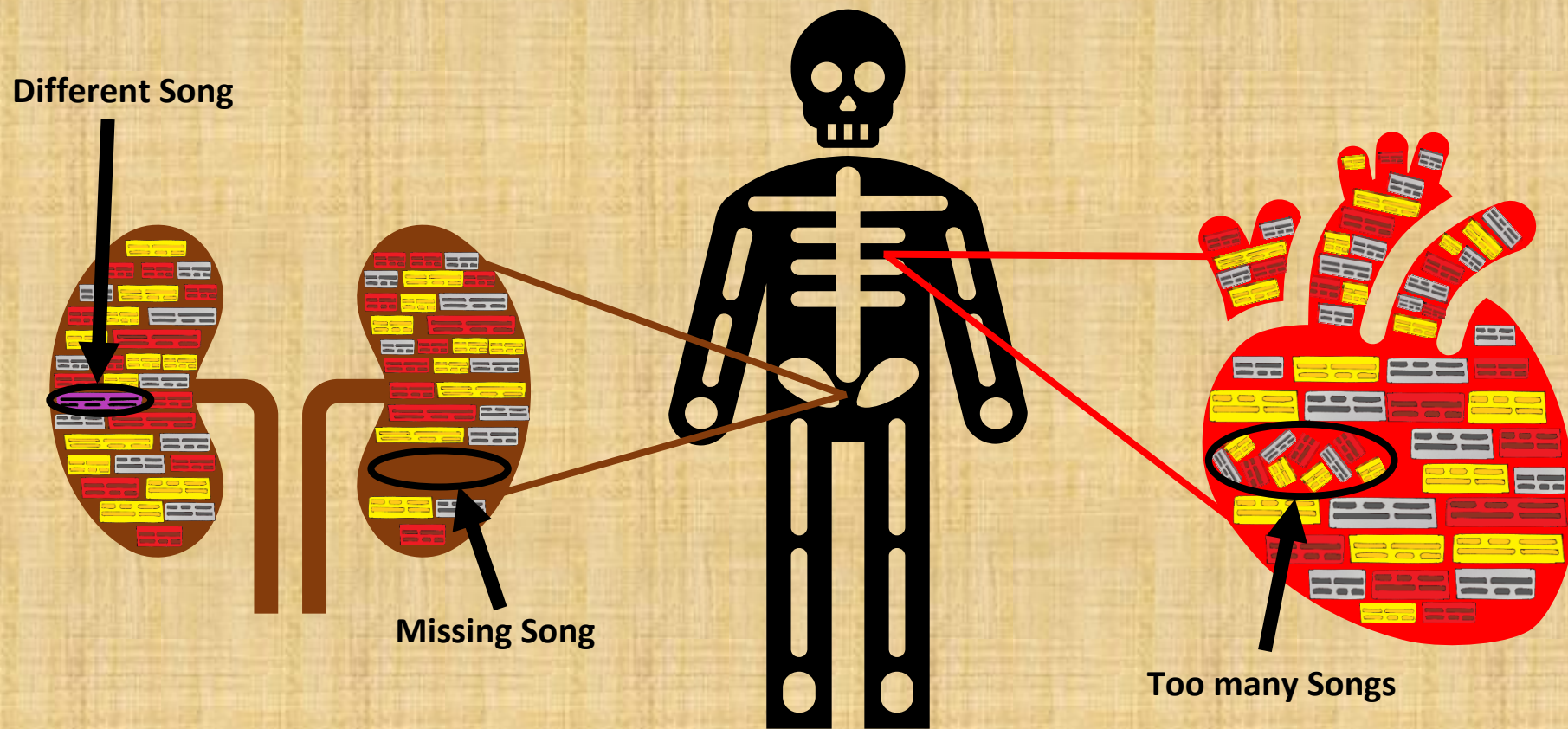


Sometimes the important songs and singing groups for our health can be mixed up in different ways when we are born. This is often random happening by accident and is **no one's fault**.

There are a number of ways in which the singing groups can be mixed up, a few examples:



When the songs of our body are sung a different way,
it can make parts of the body weak and sick.





There are many diseases that can affect the body when our DNA is sung differently. Depending on what is affecting you or your family, there are teams of Doctors and Councillors that have been set up to help you:

- (1) Children = **General Paediatric Services.**
- (2) Pregnancies = **Obstetrics & General Genetic Services.**
- (3) Cancers = **Familial Cancer Program.**

