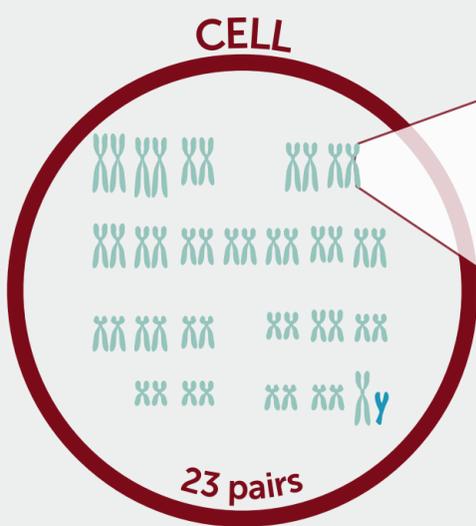


Happy Father's Day from Genome:



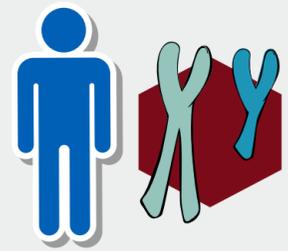
11 Neat Facts About the Y Chromosome



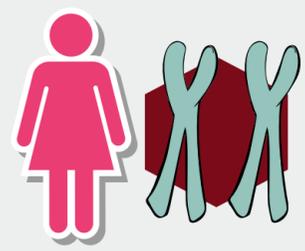
1 In the nucleus of each cell, the DNA molecule is packaged into thread-like structures called chromosomes.

2 In humans, each cell contains **23 pairs of chromosomes**, for a total of **46**.

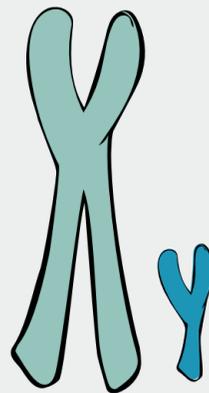
3 **22** of these pairs are called autosomes and look the same in men and women. The **23rd pair**, the **sex chromosomes**, differ between men and women.



4 Men have one **Y chromosome** and one **X chromosome**. Women have two **X chromosomes**.

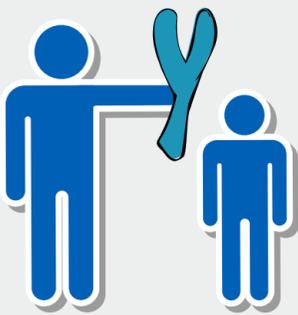


5 The **Y chromosome** is one-third the size of the **X chromosome**. The **X** has more than 1000 genes, while the **Y** has fewer than 200.



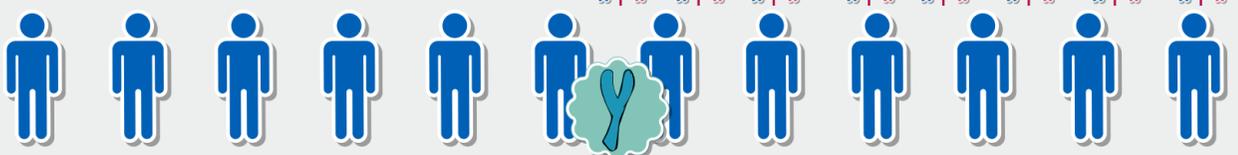
1/3rd
the size

6 Some genes that were thought to be lost from the **Y chromosome** have actually relocated to autosomes.

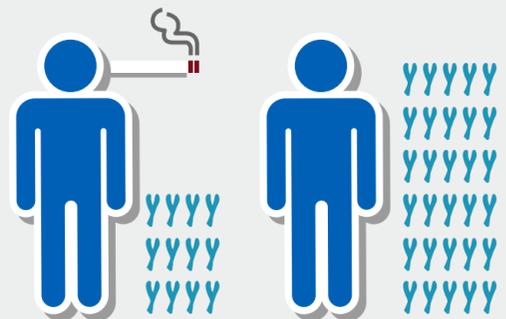


7 The **Y chromosome**, found only in men, is passed from father to son.

8 The **Y chromosomes** of all living men are related through a single male ancestor who lived over **100,000 years ago**.



9 Men who smoke have fewer **Y chromosomes** in their blood cells compared to non-smokers.



10 Y's are complicated! The ability to sequence the **Y chromosome** is relatively new field of genomics research.

11 Many health conditions are related to changes in particular genes on the **Y chromosome**.

