

What is a Chromosome?

TOUR OF THE BASICS

The screenshot shows an interactive educational interface. At the top, it says "Tour of the Basics" and "What is a Chromosome?". Below this is a navigation bar with tabs for "What is DNA?", "What is a Gene?", "What is a Chromosome?", "What is a Protein?", "What is Heredity?", and "What is a Trait?". The main content area is titled "WHAT IS A CHROMOSOME?" and contains the following text: "Each cell in our body contains a lot of DNA. In fact, if you pulled the DNA from a single human cell and stretched it out, it would be *three meters* long!" followed by "That's about as long as a car!". Below this text is a red and blue DNA double helix and a blue car. Further text asks "How does all of that DNA fit into a cell?" and answers "The DNA is packaged into compact units called 'chromosomes.'". At the bottom of the content area are "Previous" and "Next" buttons. Below the content area are three icons labeled "Size", "Packaging", and "Chromosome". At the very bottom, there is a copyright notice: "© 2004 Genetic Science Learning Center, University of Utah" and a URL: "learn.genetics.utah.edu".

1. DNA is a very large molecule and we have a large amount of DNA in each of our cells. How is it possible for all of the DNA fit into our chromosomes?

2. Each human cell has 23 pairs, or 46 chromosomes. Where do we get these chromosomes?

3. One set of chromosomes is labeled XY. What do these chromosomes determine?

5. Do all organisms have the same number of chromosomes in their cells?