

Inheritance of genes:

For this exercise you will answer a few simple questions.

Use both the slides from the lecture “Cell Division and Heredity” and the online resources below in combination to answer the questions. For this exercise, when we refer to “genetics” or “genetic information”, we are referring to protein coding genes. This means genes that code for proteins.

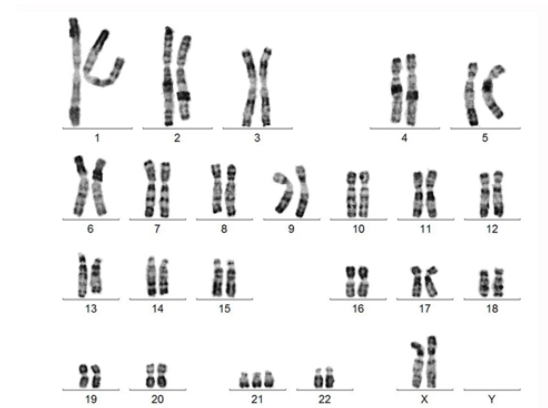
Resources:

Lecture_ Cell Division and Heredity

https://www.ensembl.org/Homo_sapiens/Location/Genome

Questions:

- 1) Do both parents contribute equally to genetics of the child?
 - Here we are talking about protein “coding genes”.
- 2) Which parent passes on more genetic information to their offspring?
- 3) What % of their genes does a male offspring inherit from the father and what % from the mother?
What % of their genes does a female offspring inherit from the father and what % from the mother?
 - Start by looking at how many protein coding genes each parent passes to each offspring sex



Protein coding genes source	Offspring	
	Male	Female
Genes inherited from father		
Genes inherited from mother		