

# 2019 DESIGNER GENES - INTERNET RESOURCES

## GENERAL PRINCIPLES OF GENETICS

Learn Genetics

<http://learn.genetics.utah.edu/>

<https://learn.genetics.utah.edu/content/basics/>

DNA from the Beginning – Classic Genetics, Molecular Genetics, Genetic Organization & Control

<http://www.dnafb.org/##>

Genetics Education Center at the University of Kansas

<http://www.kumc.edu/gec/lessons.html>

AP Biology Site with lots of goodies on all areas of Biology – See Section on Genetics

<https://sites.google.com/a/svvsd.org/chou/home/apbio/mrs-chou-s-ap-biology-lecture-notes>

<https://www.khanacademy.org/science/biology>

Mendel's Genetics

[http://anthro.palomar.edu/mendel/mendel\\_1.htm](http://anthro.palomar.edu/mendel/mendel_1.htm)

Exceptions to Simple Inheritance

[http://anthro.palomar.edu/mendel/mendel\\_3.htm](http://anthro.palomar.edu/mendel/mendel_3.htm)

The Biology Corner – Genetics

<https://www.biologycorner.com/lesson-plans/genetics/>

The Biology Project – Mendelian Genetics

[http://www.biology.arizona.edu/mendelian\\_genetics/mendelian\\_genetics.html](http://www.biology.arizona.edu/mendelian_genetics/mendelian_genetics.html)

Genome Research Institute –National Institute of Health

<http://www.genome.gov/12511466>

Genetics Reviews on Several Topics

<https://www2.le.ac.uk/projects/vgec/highereducation/topics>

Glossary of Genetics Terms

<http://anthro.palomar.edu/mendel/glossary.htm>

## SOLVING GENETICS PROBLEMS

<https://www.bio.fsu.edu/~levitan/BSC2011/Mendelian%20genetics%20problems.pdf>

<http://www.lamission.edu/lifesciences/bio3labs/Bio3%20Lab09-Fa12-Genetics.pdf>

Monohybrid Problem Set (The Biology Project, U of AZ) Tutorial on single-trait crosses.

[http://www.biology.arizona.edu/mendelian\\_genetics/problem\\_sets/monohybrid\\_cross/monohybrid\\_cross.html](http://www.biology.arizona.edu/mendelian_genetics/problem_sets/monohybrid_cross/monohybrid_cross.html)

Dihybrid Problem Set (The Biology Project, U of AZ) Tutorial on two-trait crosses.

[http://www.biology.arizona.edu/mendelian\\_genetics/problem\\_sets/dihybrid\\_cross/dihybrid\\_cross.html](http://www.biology.arizona.edu/mendelian_genetics/problem_sets/dihybrid_cross/dihybrid_cross.html)

Genetics Education Center at the University of Kansas

<http://www.kumc.edu/gec/lessons.html>

Linkage and Genetic Mapping

<http://mcb.berkeley.edu/courses/mcb140/Syllabus/AmacherLecture/Lecture5.pdf>

[http://teachers.sduhsd.net/ahaas/AP%20Biology/Genetics/genetics\\_problemsIV\\_answerswithgenelinkage.pdf](http://teachers.sduhsd.net/ahaas/AP%20Biology/Genetics/genetics_problemsIV_answerswithgenelinkage.pdf)

## HUMAN GENETICS

The Biology Project – Human Biology

[http://www.biology.arizona.edu/human\\_bio/human\\_bio.html](http://www.biology.arizona.edu/human_bio/human_bio.html)

Introduction to Basic Human Genetics

<https://www.gfmer.ch/SRH-Course-2013/community-genetics/pdf/Introduction-basic-human-genetics-Hamamy-2013.pdf>

<http://pages.mtu.edu/~shuzhang/MA5750/Lecture1out.pdf>

National Human Genome Research Institute

<http://www.genome.gov/>

National Human Genome Research Institute Educational page for students and teachers

<http://www.genome.gov/Education/>

Human Genetics Primer from US National Library of Medicine – printable PDF (6MB)

<https://ghr.nlm.nih.gov/primer>

Human Genetic Disorders

<https://www.genome.gov/10001204/specific-genetic-disorders/>

<https://learn.genetics.utah.edu/content/disorders/>

## **MITOSIS/MEIOSIS/CELL CYCLE**

<https://www.khanacademy.org/test-prep/mcat/cells/cellular-division/a/mitosis-and-meiosis>

<https://www.cellsalive.com/meiosis.htm>

<https://www2.le.ac.uk/projects/vgec/highereducation/topics/cellcycle-mitosis-meiosis>

## **MOLECULAR GENETICS**

PEDIAA.com – lots of up to date articles on Molecular Genetics and Biotechnology

<http://pediiaa.com/science/biology/molecular-biology>

<http://pediiaa.com/science/biology/molecular-biology/page/2/>

DNA Learning Center – Cold Spring Harbor Laboratory

<http://www.dnalc.org/>

Genome Research Institute –National Institute of Health

<http://www.genome.gov/12511466>

On-line Textbook of Natural History with molecular genetics

<http://waynesword.palomar.edu/bio100.htm>

DNA and GENE EXPRESSION

<http://waynesword.palomar.edu/lmexer3.htm>

DNA primer on the basics of DNA, genes, and heredity (DNA Learning Center at Cold Spring Harbor laboratory)

<http://www.dnafb.org/dnafb/>

National Human Genome Research Institute

<http://www.genome.gov/>

Mitochondria (DNA Learning Center at Cold Spring Harbor Laboratory)

<http://www.geneticorigins.org/geneticorigins/mito/mitoframeset.htm>

National Human Genome Research Institute Educational page for students and teachers

<http://www.genome.gov/Education/>

National Human Genome Research Institute Educational page for students and teachers

<http://www.genome.gov/Education/>

<http://ncerthelp.com/text.php?ques=molecular+basis+of+inheritance+class+12+notes+pdf+download>

## **BIOTECHNOLOGY**

<https://www.khanacademy.org/science/biology/biotech-dna-technology>

<http://pediiaa.com/science/biology/molecular-biology>

<http://pediiaa.com/science/biology/molecular-biology/page/2/>

[http://glencoe.mcgraw-hill.com/sites/9834092339/student\\_view0/chapter17/](http://glencoe.mcgraw-hill.com/sites/9834092339/student_view0/chapter17/)

<http://facweb.northseattle.edu/lizthomas/Lecture%202020.pdf>

<http://www2.sunysuffolk.edu/czuraa/BIO244LectureMaterials/BIO244Chapter9Notes.pdf>

<http://ncerthelp.com/text.php?ques=1434+Biotechnology+Principles+and+Processes+Class+12+Notes+Pdf+Free+Download>

<http://ncerthelp.com/text.php?ques=1434+Biotechnology+and+its+Applications+Class+12+Notes+Pdf+Download+>

<http://waynesword.palomar.edu/lmexer3b.htm>