

Sex Determination

What's the difference between being heterogametic and homogametic?

Explain the male and female chicken sex chromosomes.

What's phenotypic dimorphism? Can you provide a few example species?

The _____ chromosome in humans causes maleness.

Mullerian/paramesonephric ducts are in _____

Wolffian ducts are in _____

What is the definition of differentiation?

The mesoderm contains:

The ectoderm contains:

The endoderm contains:

Briefly describe the differentiation of the reproductive tract.

If an embryo starts producing the SRY (AKA TDF) protein, what happens next?

Primary versus Secondary sexual differentiation:

Compare the size of the Y-chromosome to the X-Chromosome. What is the PARs region on the Y-chromosome and why is it important?

Describe the MSY and the SRY regions on the Y-chromosome.

Describe TDF:

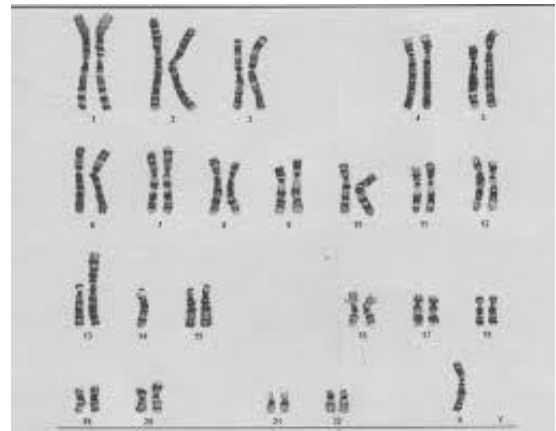
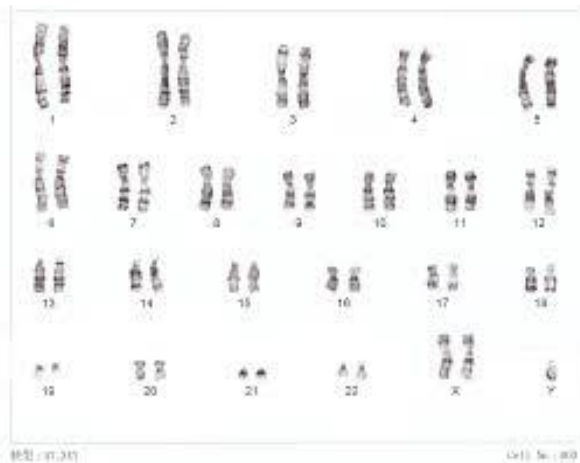
What produces AMH? What does it do?

What are the two theories as to why birds wait until a few days into incubation to differentiate?

Brain dump: the gynandromorphic chicken

What is a freemartin calf? How does this happen?

Describe Klinefelter and Turner syndrome. Which karyotype belongs to which?



What is dosage compensation? What are bar bodies and x-inactivation? How many escapes inactivation?

What is the Lyon hypothesis?

Describe TSD and the role of aromatase: