

# WHAT'S THE DIFFERENCE?

AP BIOLOGY REVIEW by Kelly Riedell

**WHAT'S THE  
DIFFERENCE?**

**ACETYLCHOLINE**

**VS**

**ACETYL CO-A**

# WHAT'S THE DIFFERENCE?

AMINO ACID  
VS

AMINO GROUP

**WHAT'S THE  
DIFFERENCE?**

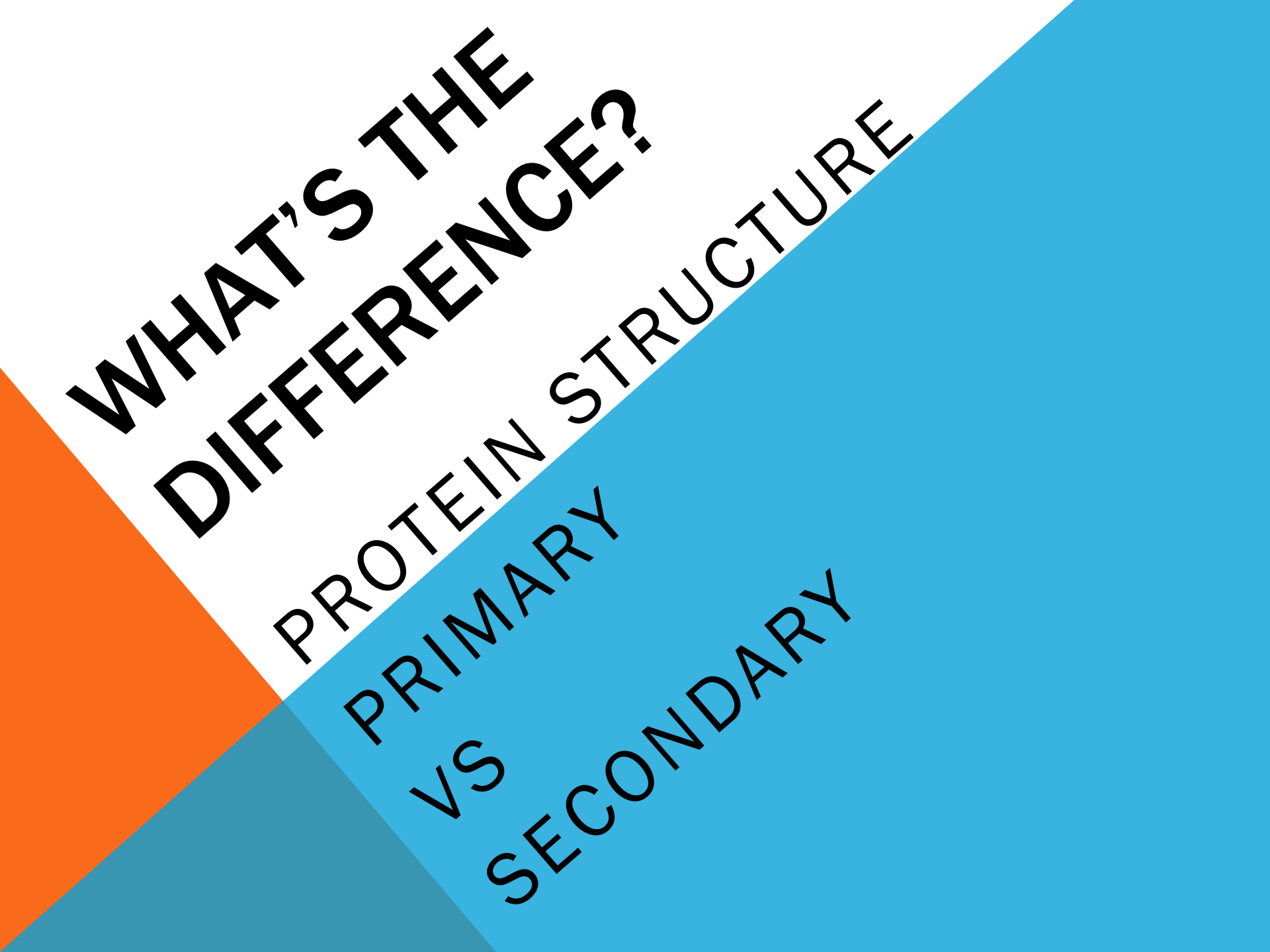
**AUTOSOME**

**VS**

**AUTOTROPH**

# WHAT'S THE DIFFERENCE?

BIOTIC  
VS  
ABIOTIC



# WHAT'S THE DIFFERENCE?

PROTEIN STRUCTURE

PRIMARY

VS

SECONDARY

# WHAT'S THE DIFFERENCE?

LYTIC CYCLE

VS

LYSOGENIC CYCLE

**WHAT'S THE  
DIFFERENCE?**

**TRANSLATION**

**VS**

**TRANSCRIPTION**



# WHAT'S THE DIFFERENCE?

EUKARYOTE

VS

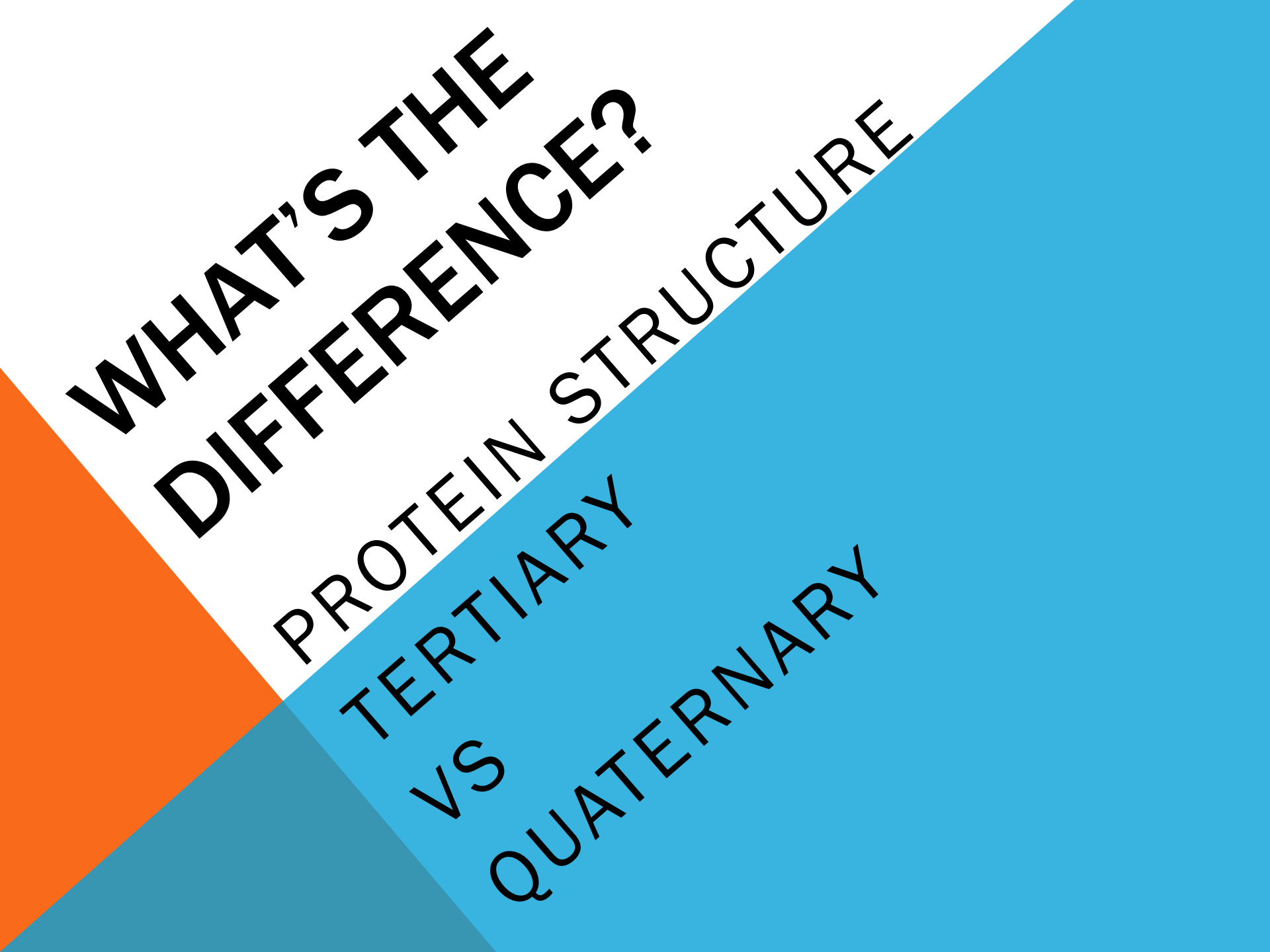
PROKARYOTE

**WHAT'S THE  
DIFFERENCE?**

**TRANSPIRATION**

**VS**

**TRANSCRIPTION**



# WHAT'S THE DIFFERENCE?

PROTEIN STRUCTURE  
TERTIARY  
VS  
QUATERNARY

**WHAT'S THE  
DIFFERENCE?**

**ALDEHYDE  
VS  
KETONE**

**WHAT'S THE  
DIFFERENCE?**

**SYMPATRIC SPECIATION**

**VS**

**ALLOPATRIC SPECIATION**

# WHAT'S THE DIFFERENCE?

AMINO ACID

VS

NUCLEIC ACID

**WHAT'S THE  
DIFFERENCE?**

**AMINO ACID**

**VS**

**NUCLEOTIDE**

**WHAT'S THE  
DIFFERENCE?**

**TRANSLATION**

**VS**

**TRANSFORMATION**



# WHAT'S THE DIFFERENCE?

INTRON  
VS  
EXON

**WHAT'S THE  
DIFFERENCE?**

**METAPHASE**

**VS**

**METASTASIS**

**WHAT'S THE  
DIFFERENCE?**

**CONJUGATION**

**VS**

**TRANSFORMATION**

# WHAT'S THE DIFFERENCE?

OPERON

VS

OPERATOR

# WHAT'S THE DIFFERENCE?

PEDIGREE  
VS

KARYOTYPE

**WHAT'S THE  
DIFFERENCE?**

**OPERATOR**

**VS**

**PROMOTER**

**WHAT'S THE  
DIFFERENCE?**

**NUCLEOID**  
**VS**

**NUCLEUS**

**WHAT'S THE  
DIFFERENCE?**

**TRANSFORMATION  
VS  
TRANSDUCTION**



**WHAT'S THE  
DIFFERENCE?**

**CHROMATIN**

**VS**

**CHROMOSOME**

**WHAT'S THE  
DIFFERENCE?**

**PLASMID**

**VS**

**TRANSPOSON**

**WHAT'S THE  
DIFFERENCE?**

**REPRESSOR**

**VS**

**OPERATOR**

# WHAT'S THE DIFFERENCE?

MUTUALISM

VS

COMMENSALISM

**WHAT'S THE  
DIFFERENCE?**

**NITROGEN FIXATION  
VS  
DENITRIFICATION**

# WHAT'S THE DIFFERENCE?

CALVIN CYCLE

VS

KREBS CYCLE

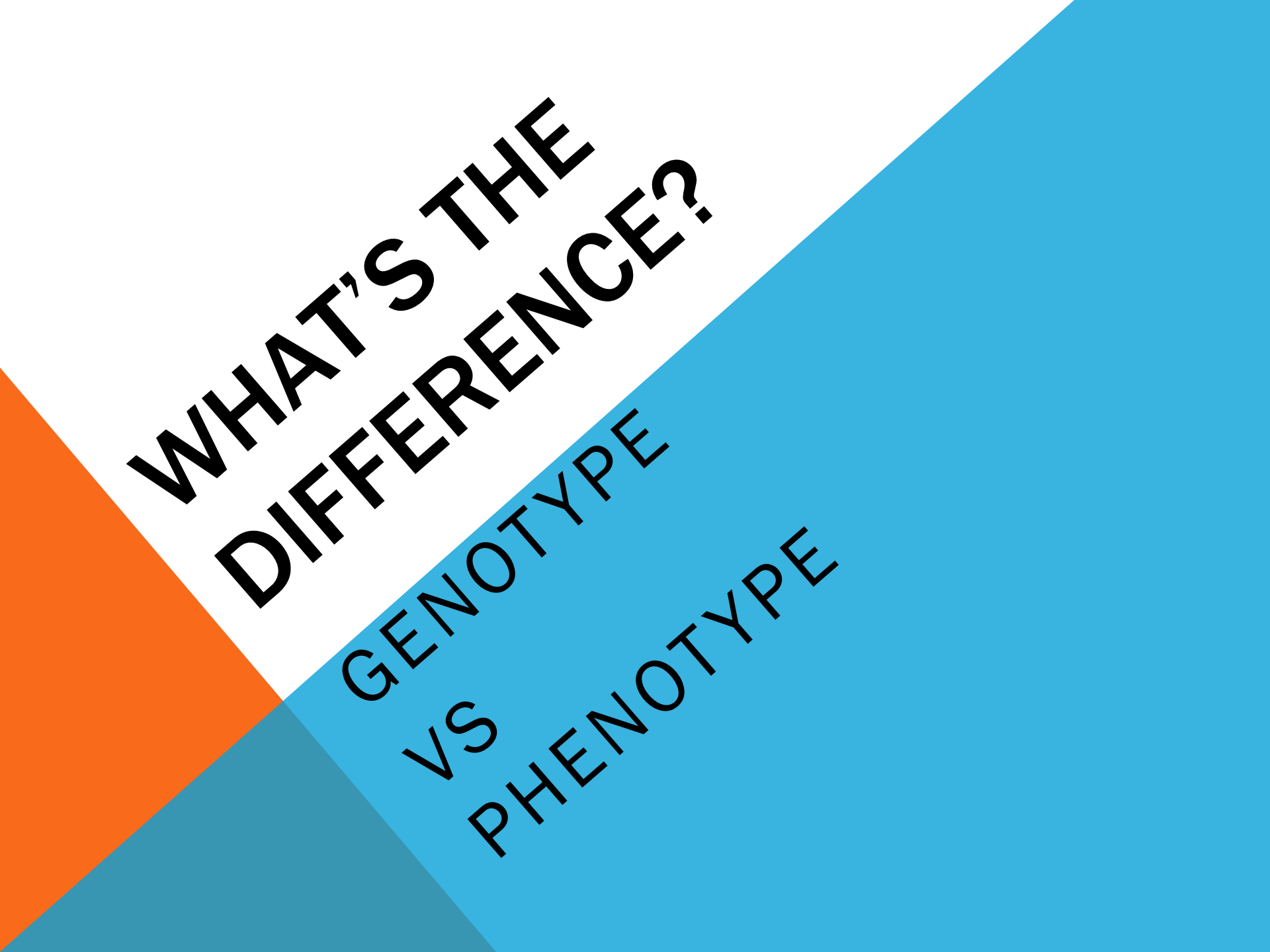
# WHAT'S THE DIFFERENCE?

CLONE  
VS  
CLADE

**WHAT'S THE  
DIFFERENCE?**

**PLASMOLYSIS  
VS  
CYTOLYSIS**





# WHAT'S THE DIFFERENCE?

GENOTYPE  
VS  
PHENOTYPE

# WHAT'S THE DIFFERENCE?

KINESIS  
VS  
TAXIS

**WHAT'S THE  
DIFFERENCE?**

**THIGMOTROPISM**

**VS**

**PHOTOTROPISM**

# WHAT'S THE DIFFERENCE?

BARR BODY

VS

GOLGI BODY

# WHAT'S THE DIFFERENCE?

HYPOTONIC

VS

HYPERTONIC

# WHAT'S THE DIFFERENCE?

HISTONE

VS

HOX GENES

**WHAT'S THE  
DIFFERENCE?**

**TIGHT JUNCTION**

**VS**

**PLASMODESMATA**

# WHAT'S THE DIFFERENCE?

STARCH

VS

GLYCOGEN



**WHAT'S THE  
DIFFERENCE?**

**THYLAKOIDS**

**VS**

**CRISTAE**

**WHAT'S THE  
DIFFERENCE?**

**TRANSLOCATION  
IN A PLANT  
VS  
IN A GENE**

# WHAT'S THE DIFFERENCE?

ALVEOLI  
VS  
VILLI

**WHAT'S THE  
DIFFERENCE?**

**SULFHYDRYL GROUP  
VS  
METHYL GROUP**

# WHAT'S THE DIFFERENCE?

MATRIX

VS

STROMA

# WHAT'S THE DIFFERENCE?

LIGAND

VS

LIGASE

# WHAT'S THE DIFFERENCE?

TELOMERE  
VS  
CENTROMERE

# WHAT'S THE DIFFERENCE?

TETRAD

VS

TETRAPOD



# WHAT'S THE DIFFERENCE?

ZYGOTE

VS

XYLEM

**WHAT'S THE  
DIFFERENCE?**

**ALPHA GLUCOSE**

**VS**

**BETA GLUCOSE**

# WHAT'S THE DIFFERENCE?

HOMOLOGOUS STRUCTURES  
VS  
ANALOGOUS STRUCTURES

**WHAT'S THE  
DIFFERENCE?**

**CARNIVORE  
VS**

**CAROTINOID**

# WHAT'S THE DIFFERENCE?

ENDOSYMBIOTIC  
THEORY

VS  
ENDOCYTOSIS

# WHAT'S THE DIFFERENCE?

GOLGI BODY

VS

BARR BODY

# WHAT'S THE DIFFERENCE?

AUXIN  
VS  
AXON

# WHAT'S THE DIFFERENCE?

B CELL  
VS  
T CELL



**WHAT'S THE  
DIFFERENCE?**

**BATESIAN MIMICRY**

**VS**

**MULLERIAN MIMICRY**

**WHAT'S THE  
DIFFERENCE?**

**COELOM  
VS  
CENTRIOLE**

**WHAT'S THE  
DIFFERENCE?**

**INTERMEMBRANE SPACE  
VS  
THYLAKOID SPACE**

# WHAT'S THE DIFFERENCE?

CARBON FIXATION

VS

NITROGEN FIXATION

**WHAT'S THE  
DIFFERENCE?**

**CARBONYL GROUP**

**VS**

**CARBOXYL GROUP**

# WHAT'S THE DIFFERENCE?

CATABOLIC PATHWAY

VS

ANABOLIC PATHWAY

WHAT'S THE  
DIFFERENCE?

CHAPARONIN

VS

EUBIQUITIN

**WHAT'S THE  
DIFFERENCE?**

**CHIASMATA**

**VS**

**CHITIN**



**WHAT'S THE  
DIFFERENCE?**

**DISULFIDE BRIDGE**

**VS**

**DISTAL TUBULE**

**WHAT'S THE  
DIFFERENCE?**

**CYTOKININ  
VS  
CYTOKINESIS**

**WHAT'S THE  
DIFFERENCE?**

**COUNTERCURRENT FLOW**

**VS**

**CYTOPLASMIC STREAMING**

# WHAT'S THE DIFFERENCE?

COENZYME

VS

COFACTOR

# WHAT'S THE DIFFERENCE?

KARYOTYPE

VS

PEDIGREE

**WHAT'S THE  
DIFFERENCE?**

**COMPETITIVE EXCLUSION  
VS  
COMPETITIVE INHIBITOR**

# WHAT'S THE DIFFERENCE?

DNA  
VS  
RNA

# WHAT'S THE DIFFERENCE?

ECTODERM

VS

ECTOTHERM



**WHAT'S THE  
DIFFERENCE?**

**FOUNDER EFFECT**

**VS**

**BOTTLE NECK EFFECT**

**WHAT'S THE  
DIFFERENCE?**

**GLYCOSIDIC LINK**

**VS**

**PEPTIDE BOND**

**WHAT'S THE  
DIFFERENCE?**

**HAPLOID**

**VS**

**DIPLOID**

**WHAT'S THE  
DIFFERENCE?**

**GEOMETRIC ISOMER**

**VS**

**STRUCTURAL ISOMER**

**WHAT'S THE  
DIFFERENCE?**

**HELICASE**

**VS**

**LIGASE**

# WHAT'S THE DIFFERENCE?

HEMOPHILIA

VS

HEMOGLOBIN

**WHAT'S THE  
DIFFERENCE?**

**HYDROPHOBIC**

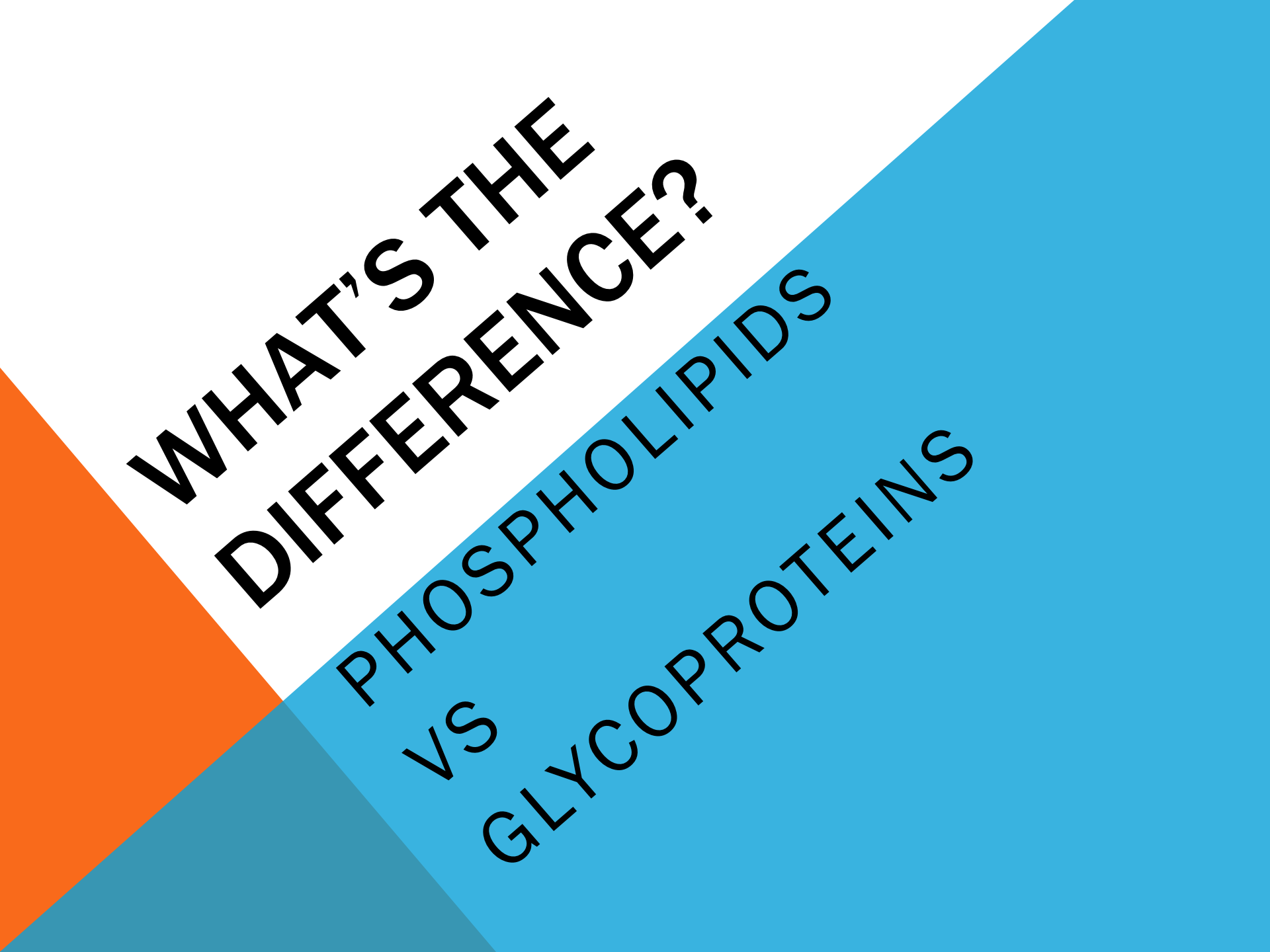
**VS**

**HYDROPHILIC**

# WHAT'S THE DIFFERENCE?

INDEPENDENT ASSORTMENT  
VS  
INCOMPLETE DOMINANCE





**WHAT'S THE  
DIFFERENCE?**

**PHOSPHOLIPIDS  
VS  
GLYCOPROTEINS**

# WHAT'S THE DIFFERENCE?

INNATE IMMUNITY

VS

ACQUIRED IMMUNITY

**WHAT'S THE  
DIFFERENCE?**

**ISOMER**

**VS**

**ISOTOPE**

# WHAT'S THE DIFFERENCE?

NUCLEOLUS

VS

NUCLEOSOME

**WHAT'S THE  
DIFFERENCE?**

**AMYLASE**

**VS**

**AMYLOSE**

**WHAT'S THE  
DIFFERENCE?**

**CHROMATIN**

**VS**

**CHROMOSOME**

# WHAT'S THE DIFFERENCE?

GENE  
VS  
ALLELE

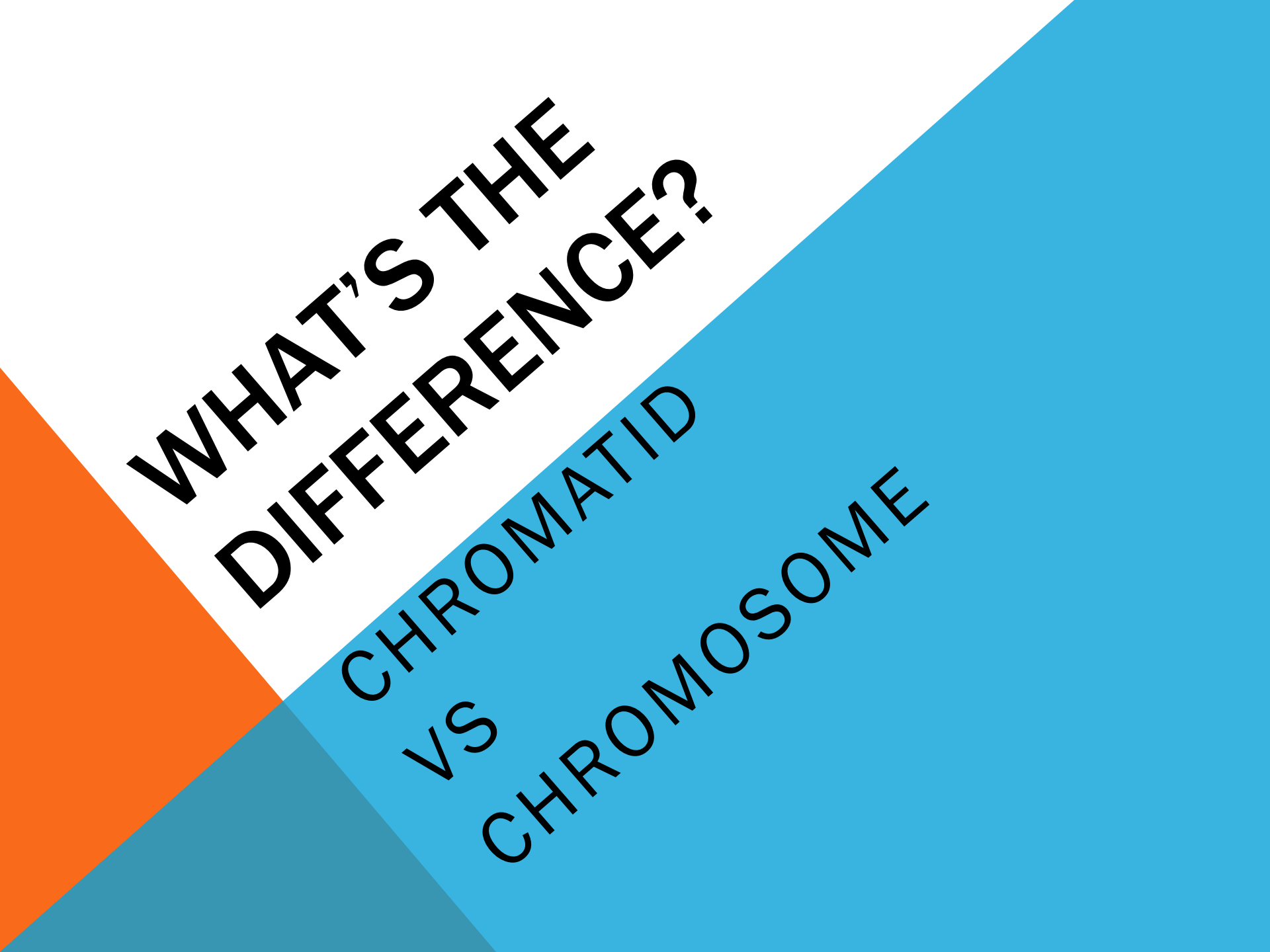
**WHAT'S THE  
DIFFERENCE?**

**CENTROSOME**

**VS**

**CENTRIOLE**





**WHAT'S THE  
DIFFERENCE?**

**CHROMATID  
VS  
CHROMOSOME**

# WHAT'S THE DIFFERENCE?

NULL HYPOTHESIS

VS

ALTERNATE HYPOTHESIS

**WHAT'S THE  
DIFFERENCE?**

**DEPENDENT VARIABLE**

**VS**

**INDEPENDENT VARIABLE**

**WHAT'S THE  
DIFFERENCE?**

**HYDROPHOBIC**

**VS**

**HYDROPHILIC**

**WHAT'S THE  
DIFFERENCE?**

**CATALYST**

**VS**

**CATALASE**

**WHAT'S THE  
DIFFERENCE?**

**PRIMASE**

**VS**

**HELICASE**

**WHAT'S THE  
DIFFERENCE?**

**PUNNETT SQUARE  
VS  
PEDIGREE**

**WHAT'S THE  
DIFFERENCE?**

**ACTIVE SITE  
VS**

**ALLOSTERIC SITE**



**WHAT'S THE  
DIFFERENCE?**

**COMPETITIVE INHIBITOR**

**VS**

**NON-COMPETITIVE  
INHIBITOR**

**WHAT'S THE  
DIFFERENCE?**

**ANAPHASE I**

**VS**

**ANAPHASE II**

**WHAT'S THE  
DIFFERENCE?**

**COVALENT BOND**

**VS**

**HYDROGEN BOND**

# WHAT'S THE DIFFERENCE?

POSITIVE FEEDBACK

VS

NEGATIVE FEEDBACK

**WHAT'S THE  
DIFFERENCE?**

**TOPOISOMERASE  
VS  
DNA POLYMERASE**

**WHAT'S THE  
DIFFERENCE?**

**PUNCTUATED EQUILIBRIUM**

**VS  
HARDY-WEINBERG  
EQUILIBRIUM**

# WHAT'S THE DIFFERENCE?

PHENOTYPIC PLASTICITY  
VS  
POLYGENIC TRAITS

**WHAT'S THE  
DIFFERENCE?**

**SUBSTITUTION MUTATION  
VS  
FRAMESHIFT MUTATION**



# WHAT'S THE DIFFERENCE?

PYRIMIDINE  
VS  
PURINE

**WHAT'S THE  
DIFFERENCE?**

**SPLICEOSOMES  
VS  
CYCLINS**

**WHAT'S THE  
DIFFERENCE?**

**ALTERNATIVE SPLICING  
VS  
GENE LINKAGE**

**WHAT'S THE  
DIFFERENCE?**

**INVASIVE SPECIES**

**VS**

**KEYSTONE SPECIES**