

YEAR 13 - Batch 1/2 - BIOLOGY

WEEK 2 (6th Sept - 10th Sept)

Work sent to students through Class Bio Whats App Group /Google Classroom

Topic 7.2:- Factors affecting Gene Expression

L.O – Explain how cells become specialised through differential gene expression, producing active mRNA leading to synthesis of proteins, which in turn control cell processes or determine cell structure in animals and plants

Biology Students Book 2

Monday – 1 st Period (Zoom) –B1 Sunday – 6 th Period (Zoom) – B2	Students able to Differentiate cell determination & cell differentiation in organisms. Suggest the cause of determination & differentiation of cells. Students to research on Gene Expression in Prokaryote Resources: A2 Board works ,PowerPoint & Video link https://www.youtube.com/watch?v=jp6L5emD8rw
Monday – 2 nd Period (Zoom) –B1 Sunday – 7 th Period (Zoom) – B2	Students able to Identify the role of regulator, promoter & structural genes in gene expression prokaryotes Explain the role of transcription factors in regulating gene expression Students to research on Gene Expression in Eukaryotes Resources: A2 Board works ,PowerPoint & Video link https://www.youtube.com/watch?v=10YWgqmAEsQ
Tuesday – 4 th Period (Zoom) –B1 Monday – 3 rd Period (Zoom) –B2	Students able to Compare the stages of gene expression in prokaryote and eukaryote. Describe how post-transcription modification of mRNA in eukaryotic cells(RNA splicing) can result in different products from a single gene. Students to research on Epigenetics Resources: A2 Board works ,PowerPoint & Video link https://www.youtube.com/watch?v=DHRRj06xdkA https://www.youtube.com/watch?v=KTKzsee5-jE

YEAR 13 - Batch 1/2 - BIOLOGY

Week 2 (6th Sept- 10th Sept)

Work sent through Google classroom/G mail/Online Quiz/ZOOM Learning Platform

Topic 8.1,1 and 8.1,2 - Genetics

L.O - Mutations are the source of new variations and that the process of random assortment .Continuous and discontinuous variation. Construct genetic crosses and pedigree diagrams. Codominance and multiple alleles. Inheritance of two non-interacting unlinked genes. Use chisquared (χ^2) tests to test the significance of the difference between observed and expected results

<p>Sunday -0 period –B2</p> <p>Tuesday-5th period –B1</p>	<p>ZOOM SESSION</p> <p>BOARD WORKS –[Inheritance -No-3-20]</p> <p>Video and PPT: Continuous and discontinuous variation .:www.science.co.uk/biology/genetics.html, www.internet4classrooms.com</p> <p>Text Book Page Numbers – 138-139 -Worksheet – Genetics</p> <p>Students able to:</p> <p>Define the terms <i>locus, allele, dominant, recessive, codominant, homozygous, heterozygous, phenotype and genotype</i>. Analyse graphs for continuous and discontinuos variation.</p> <p>Analyse the genetic diagrams and solve problems involving test crosses.Explain how random fertilisation during sexual reproduction brings about genetic variation</p>
<p>Thursday – 1st and 2nd period –B1</p> <p>Monday 8th period –B2 and Thursday 7th period –B2</p>	<p>BOARD WORKS –[Inheritance -No-3-20]</p> <p>Video and PPT: : Co dominance,multiple alleles,chi-squared test :www.science.co.uk/biology/genetics.html, www.internet4classrooms.com</p> <p>Visit www.nobelprize.org and search for ‘blood typing game’ for an interactive activity</p> <p>Text Book Page Numbers – 140-142 -Worksheet – Genetics</p> <p>Students able to:</p> <p>Analyse genetic diagrams to solve problems involving co-dominance ,multiple alleles crosses. Apply the chi-squared test to test the significance of differences between observed and expected results. Difference between multiple alleles and polygenic traits can be confusing, so how to differentiate with examples. Explain the genetic terms and construct genetic crosses and pedigree diagrams</p>

