BIOLOGY A LEVEL SUPER-CURRICULAR: AIMING FOR THE TOP AND ASPIRING HIGH

Reading Tasks

The immortal life of Henrietta Lacks by Rebecca Skloot

This book is a fascinating account of the life, and afterlife, of one woman who changed the medical world forever. Balancing the beauty and drama of scientific discovery with dark questions about who owns the stuff our bodies are made of, this book is an extraordinary journey in search of the soul and story of a real woman, whose cells live on today in all four corners of the world.

The Ancestors Tale' by Richard Dawkins

This book is a journey through time to meet our common ancestors. From chimpanzees to orangutans, this collection of 40 tales, with each exploring an aspect of evolutionary biology through the stories of characters met along the way.

The Tale of the Dueling Neurosurgeons by Sam Kean

In this book, we travel through time with stories of neurological curiosities: phantom limbs, Siamese twin brains and viruses that eat patients' memories. With the lucid, masterful explanations and sharp wit, Kean explores the brain's secret passageways and recounts the forgotten tales of the ordinary people whose struggles, resilience, and deep humanity made neuroscience possible.

Silent Spring by Rachel Carson

This book alerted a large audience to the environmental and human dangers of pesticides, spurring revolutionary changes in the laws affecting our air, land, and water. Despite condemnation and attempts by the chemical industry to ban the book, Carson succeeded in creating a new public awareness of the environment which led to changes in government and inspired the ecological movement.

Guns, germs and Steel by Jared Diamond

This book puts the case that geography and biogeography, not race, moulded the contrasting fates of Europeans, Asians, Native Americans, sub-Saharan Africans, and aboriginal Australians. An ambitious synthesis of history, biology, ecology and linguistics, this book is a ground-breaking and humane work of popular science that can provide expert insight into our modern world.

This is going to hurt by Adam Kay

Welcome to the life of a junior doctor: 97-hour weeks, life and death decisions and a constant tsunami of bodily fluids. This book provides a no-holds-barred account of Adam Kay's time on the NHS front line. Hilarious, horrifying and heart-breaking, this diary is everything you wanted to know – and more than a few things you didn't – about life on and off the hospital ward.

Preventable (how a pandemic changed the world and how to stop the next one) by Devi Sridhar

Arguably the definitive account of the Covid-19 pandemic thus far, this book approaches the public health crisis from medical, political and economic standpoints to craft a compelling narrative unafraid to highlight incompetence or inequality - in the hope of preventing another similar catastrophe in years to come.

Writing Tasks

Oxford Science Writing Competition

Enter this annual science competition from Oxford University. Click here for more information.

Article

Write an <u>article</u> on the subject of your choice, suitable for publication in a review journal (e.g. Biological Sciences review).

Listening Tasks

Imaginary World

Imaginary worlds podcast

Imaginary Worlds sounds like what would happen if NPR went to ComicCon and decided that's all they ever wanted to cover. Host Eric Molinsky uses his skills to create thoughtful, sound-rich episodes about science fiction, fantasy, and other genres of speculative fiction.

Point of Discovery - Point of discovery podcast - Behind every scientific discovery is a scientist (or 12) and a story. "Point of Discovery" takes you on a journey beyond WHAT we know to HOW we know it. Along the way, listeners will meet the sometimes quirky, always passionate people.

Watching Tasks

Fantastic Fungi

Fantastic Fungi - available via Netflix

Delve into the magical world of fungi, from mushrooms that clear oil spills to underground fungal networks that help trees communicate.

My Octopus Teacher

My octopus teacher available via Netflix.

An incredible true story about a man and his quest to befriend and octopus. A filmmaker forges an unusual friendship with an octopus living in a South African kelp forest, learning as the animal shares the mysteries of her world.

Erin Brockovich

Erin Brockovich film, available via Netflix.

A true story, Erin was never trained, or indeed meant to work in a lawyer's office. She discovers some legal files that don't add up... On investigation she discovers an injustice, and decides, against the odds, to take on the bad guys on behalf of a poor and very ill community in a small town.

Research Tasks

Summer School

Imperial college summer schools and work experience opportunities - keep a lookout on their website.

Trips & Visits

Eden Project

The Eden project

Our global garden in Cornwall which sets the stage for an extraordinary day out where you'll rediscover the natural world as you've never experienced it before.

Sign Up

Sign up for the Royal Institution Christmas lectures in London

Creative Tasks

A Tour

Create a virtual tour of the immune system.

Create a shrimp

Create your own Brine shrimp ecosystem.

Student Led Tasks

Join

Join the Royal Society for Biology and take a look at their specially tailored content for students.

Join

Interested in <u>becoming a medic</u>? Take a look at this website for info on volunteering and exams.