# **Pre-C6th Home Study**

**UNIVERSAL PROJECT FOR YEAR 11 HOME LEARNING -**PHYSICS

01

**STEP** 

02

STEP

03

# THE BRIEF

**IDENTIFY AN AREA OF PHYSICS THAT INTERESTS YOU. POSSIBLE TOPICS INCLUDE:** 

CERN AND THE LHC, HUBBLE, THE ISS, DARK MATTER AND DARK ENERGY, MEDICAL APPLICATIONS OF PHYSICS, SPACE EXPLORATION, NUCLEAR **FISSION AND FUSION, RENEWABLE** ENERGY, EXOPLANETS.



# **CREATE A QUESTION**

WHAT IS MATTER? WHERE IS ALL THE **ANTI-MATTER?** WHAT IS DARK MATTER? HOW IS PHYSICS USED IN MEDICINE? WHAT IS THE PHYSICS OF FORMULA ONE? IS THERE LIFE ANYWHERE ELSE IN THE **UNIVERSE? COULD WE LIVE ON MARS?** COULD WE RUN THE UK WITH JUST **RENEWABLE ENERGY?** COULD EVERYONE IN THE UK USE **ELECTRIC CARS?** HOW FAR ARE WE AWAY FROM **NUCLEAR FUSION?** WHO WAS THE MOST IMPORTANT **SCIENTIST IN HISTORY?** 



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# WHAT TO INCLUDE

USE DATA (IN THE FORMS OF GRAPHS OR TABLES) TO SUPPORT YOUR WRITTEN WORK.

**USE KEY SCIENTIFIC TERMS (DEFINING** THEM WHERE NECESSARY)) CONSIDER THE FINANCIAL AND **ENVIRONMENTAL ASPECTS OF YOUR** TOPIC



#### DO YOUR RESEARCH

**USE THE LINKS BELOW TO FIND STEP** RELEVANT INFORMATION FOR YOUR QUESTION. MAKE NOTES, USE MINDMAPS AND TABLES MAKE SURE YOU KEEP A LIST OF

# **CREATE YOUR** PRODUCT

A POWERPOINT OR USE CANVA TO PRODUCE A POSTER OR MAGAZINE. MAKE A WEBPAGE, VIDEO OR E-BOOK.

THE SOURCES USED .

 $6^{\text{TH}}$ 

**STEP** 05

HTTP://HOME.CERN/ABOUT HTTP://JOSHWORTH.COM/DEV/PIXELSPACE/PIXELSPACE\_SOLARSYSTEM.HT ML HTTP://CLIMATE.NASA.GOV/ HTTPS://MARS.NASA.GOV/INDEX.CFM HTTPS://WWW.NASA.GOV/ HTTPS://WWW.ITER.ORG/ HTTPS://WWW.RENEWABLEUK.COM/ HTTPS://WWW.FORMULA1.COM/ HTTPS://EXOPLANETS.NASA.GOV/ HTTPS://EXPLORATION.ESA.INT/WEB/MARS/ HTTPS://WWW.HYPERK.ORG/ SIZING UP THE TOP QUARKS INTERACTION WITH THE HIGGS HTTPS://PHYSICS.APS.ORG/ARTICLES/V11/56 WHY SOFT SOLIDS GET SOFTER HTTPS://PHYSICS.APS.ORG/ARTICLES/V11/50 LISTENING FOR THE COSMIC HUM OF BLACKHOLES THE HTTPS://PHYSICS.APS.ORG/ARTICLES/V11/36 CORSHAM