Preparation for A-Level Geography (physical)

Key Terms: isostatic and eustatic change; storm surge; sediment cell; dynamic equilibrium; terminal groyne effect

A-Level Topic: coastal landscapes and change

Key Question: What's the biggest threat to our coastline?

Britain's coastline is over 11000 miles long according to the Ordnance Survey. That's a lot of coastline! The coastal zone offers many benefits to humans with around 3 million people living on our coastline, but it faces various threats. Some of these threats are widespread others may be localised; some have a rapid onset while others develop gradually; some are more severe than others; and some are more likely to occur than others. Your job here is to assess these varying threats.

What to do	What to read	What to watch
Use the resources provided to write notes that answer the following questions: 1) What are the different threats to our coastline? 2) How do they vary in scale and potential impact? 3) What makes some coastal areas more vulnerable than others? 4) What is the biggest threat and how do you justify your view?	https://www.bbc.co.uk/bitesize/topics/zs3ptyc a useful refresher from your GCSE work on coasts https://www.bgs.ac.uk/discoveringGeology/climateChange/general/coastal.html explanation of sea level change and impact on coastlines – it's not just about climate change http://geologylearn.blogspot.com/2015/07/coastal-erosion.html this piece refers to a variety of influences on coastal change including geology and human action (note it is written from an American context) https://nerc.ukri.org/planetearth/stories/1812/ a brief overview of major coastal flooding events in the UK https://www.internetgeography.net/topics/withernsea/ case study from Withernsea, East Yorkshire showing negative side effects of coastal management	https://www.youtube.com/watch?v=ilG7R0tA0Sw clear explanation of the differences between eustatic and isostatic sea level change https://www.youtube.com/watch?v=kYvT9VKAq6c an explanation of coastal sediment cells and their role in coastal change https://www.youtube.com/watch?v=lW3dSWkhog0 the human impact of coastal erosion https://www.youtube.com/watch?v=YpmfyTjDKlM news report on coastal flood threat https://coastal.climatecentral.org/map/12/-4.0688/51.067/?theme=sea_level_rise&map_type=coastal_dem_comparison&contiguous=true&elevation_model=coastal_dem&forecast_year=2050&pathway=rcp45&percentile=p50&return_level=return_level_1&slr_model=kopp_2014 an interactive map showing impact of projected sea level rise. Use the 'choose map' and 'change other settings' tabs to investigate different projections

What to submit

Using your notes, write a **one-page report** that answers the key question: **'What's the biggest threat to our coastline?'**
Your report should be well presented and informative to show an understanding of the content that you have been investigating. Use the key questions above to help you structure your writing and refer to evidence and examples. You can add any maps, images or diagrams to illustrate your points. Try to reach a conclusion to the key question. Please email your completed one page report to Mr Kelly by June 19th.