Geography – Coasts

Main plot- How do changing coastlines affect people and places?

Targets to be covered:

Locational Knowledge

- I can explain the key Human and Physical features of the place I'm studying and their changes over time. (kpi)
- I can identify the position and significance of the Prime/Greenwich Meridian and time zones, including day and night. (kpi)

Place Knowledge

- I can compare a region in the UK with a region in Europe and describe their significant differences and similarities. (kpi)
- I can compare regions and/or countries within Great Britain. (kpi)

Human and Physical Geography

- Y5-HPG-T1- I can describe and explain key aspects and processes of Physical geography. (kpi)
- Y5-HPG-T3- I can explain how people can both improve and damage their environments. (kpi)
- Y5-HPG-T4- I can explain how changes in the Human and Physical environments affect the people living there, and how they can be managed sustainably. (kpi)
- Y5-HPG-T5- I can explain my own views, and the views of others.

Geographical Skills and Fieldwork

- Y5-GSF-T1- I can use age-appropriate maps, atlases and globes to describe places I'm studying and their Human and Physical features. (kpi)
- Y5-GSF-T4- I can use fieldwork to observe, measure, record and present the Human and Physical features, using a range of methods. (kpi)

Week	Order of Study – Main plots and Subplots – links to geographical skills
1	**LI- I can explain my own views and the views of others.** **Why might people want to live on the coast today?** Would you like to live on the coast? Why? What do we know about coasts? Chn complete first two columns of KWL grid and pre-assessment. **Review**- Look at a blank map of the UK. Can chn name the countries of and the seas surrounding the UK (recap of KS1)? Show chn a selection of images of the coast. Brainstorm words and features. What do the pictures have in common? How would they define the word 'coast'? Discuss pupils perceptions of the coast. Where have you been on the coast? What did you do there? What did you see? Show chn world map of settlements (ppt). What do you notice about the location of these settlements? *The majority are coastal!* Why did people establish settlements on the coast? (Link to settlements topic from Year 3.) Can they name any cities that lie on the coast? Use google maps to locate their suggestions or look for examples. Introduce chn to Seb Green who walked more than 3000 miles along the UK coastline (ppt). What might Seb have seen (recap difference between human and physical features)? Show chn ppt and discuss coastal features he saw. In pairs, chn match the OS map extracts to the photos of coastal features (activity sheet 5). Stick into books.

	Deduce further information about coastal features. Complete coastal feature glossary (activity sheet 6) by matching names with definitions. Use the seaside people cards, ppt 1 and knowledge of coastal features to answer the question: Why might people want to live on the coast today? Would you like to live on the coast? Why? Self assessment. **Resources needed:** images of the coast, PPT 1, Activity sheet 1: seaside people, PPT 2, activity sheet 5: matching map to photo, activity sheet 6: coastal features **Key vocabulary:** coast, coastline, settlement, tourism, trade, leisure, physical feature, human feature, bay, cliff, sand, port, lighthouse, harbour, islet, salt marsh, pier, resort, stack, arch, spit, mudflat, estuary
2/3	**LI- I can describe and explain key aspects and processes of a coastline.** **What special features does a coastal location have?** Why? How are they formed? **Review**- Name 5 coastal landforms and features from last lesson. Why does the coast look different everywhere? How do you think the coastline changes? How were the features formed by the sea? Watch video on ppt which explains how waves are created. Chn could draw their own diagram and write a brief explanation. What can chn remember about erosion from our Rivers topic last half-term? Look at ppt and video to show how bays and headlands are formed (hard rock and soft rock). Chn summarise the process with a labelled diagram. Watch video on the formation of caves, arches, stacks and stumps. Label the diagram with the feature names and explain each step of the process. Use ppt 3 video to explain the process of longshore drift. What do the chn remember about the process of deposition from our Rivers topic? What will be deposited first (sand, mud, stones)? Why? Could demonstrate swash and backwash of LSD with beanbags. Chn act as waves and move in the same direction as the 'wind' (swash). Pick up any beanbags in their way. Then move back in a straight line (backwash). Then the next wave (child) moves. How far have the beanbags moved by the end? Does it depend on the angle of the wind? Stick in diagram and pictures of practical and children summarise longshore drift. Give chn diagram of depositional features, photos and their definition. Chn match and stick in books. Teacher mark. **Resources needed**: PPT 3, coastal erosion ppt, bay and headland diagrams, BBC Two - Coast, Learning Zone Highlights, A Changing Geography, Coastal erosion and landforms, erosional landforms diagram, beanbags, depositional features diagram, photos and definitions **Key vocabulary:** coast, coastline, headland, bay, beach, erosion (hydraulic action, abrasion, corrosion), waves (low-energy and high-energy), cave, arch, stack, stump, sediment, transportation, deposition, longshore drift, swash, backwash, spit, bar, lagoon, tombolo
4	**LI- I can explain how changes in the Human and Physical environments affect the people living there, and how they can be managed sustainably in order to make improvements. (kpi)** **How do changing coastlines affect people and places?** How can we protect the coast from erosion? How do different sea defences work? How do different people feel about the erosion at Happisburgh? **Review**- What is erosion? What is deposition? How/why does the coastline change?

	Show a picture of Happisburgh (do not share where it is yet). What do they think has happened? Link it back to previous lessons on erosion and deposition. Discuss the different shoreline management plans and then look at the sea defences sheet. Explain the difference between hard engineering and soft engineering. Pupils stick in one example of a sea defence (resource sheet 8) and work in pairs to discuss it's pros and cons. Share ideas with the class. Children should also consider costs of the defences (resource sheet 9). Introduce Happisburgh using photos. Would they like to live there? Investigate what is happening there using video/news links. Would they still like to live there? How would it feel to live there? Look at the stakeholders who may have different viewpoints on what is happening in Happisburgh. Give each child one of the stakeholder roles to stick in their book. Have a class discussion: how would each stakeholder react if they were at a village fete when a large chunk of land fell away at the edge of the village? In books, pupils explain what their character's viewpoint was, did they agree with them and why and what did they think of the other viewpoints? Have a quick poll to see who thinks more money should be spent on coastal defences; who thinks money should be given for compensation; and who thinks that managed retreat is the only sensible option. Children to answer final question: What is their recommendation for the future of Happisburgh? Give reasons. Peer assessment. Link to English- newspaper about erosion in Happisburgh. **Resources needed:** PPT, sea defence sheet (8), costs sheet (9), **Key vocabulary:** Happisburgh, shoreline management, sea defences, hard engineering, soft engineering, stakeholder, compensation, managed retreat, hold the line, advance the line, gabions, groynes, rip rap, revetments, sea walls, beach nourishment, beach re-profiling
5	**LI- I can identify the position and significance of the Prime/Greenwich Meridian and time zones, including day and night.** **What are time zones?** Which countries are ahead of the UK and which are behind? What is the Prime/Greenwich Meridian? What time zone is Barcelona in? Watch these videos: https://www.bbc.co.uk/bitesize/topics/zvsfr82/articles/zjk46v4 https://www.youtube.com/watch?v=C-whBKIB1e0 Look at time zones ppt. Use Digimap for Schools 'Investigating Time Zones' Resource 9 for lesson planning. Chn to explore the Time zones overlay and use it to answer questions relating to time zones. Self assessment. **Resources needed:** video links, timezones ppt, Digimap planning, password and username, laptops, recording sheet **Key Vocabulary:** North Pole, South Pole, time zones, hemisphere, Prime Meridian, Greenwich meridian, rotates, axis
6	**LI- I can compare Bedworth with coastal regions in the UK and Europe, and describe their significant differences and similarities.** **What are the similarities and differences between coastal and inland locations?** What are coastal areas overseas like? **Review-Which County** is Bedworth in? Which County is Happisburgh in? Identify Spain and some other countries on a map of Europe. What is the capital of Spain?

	Pupils to research the location, physical geography and human geography of Bedworth, Happisburgh and Barcelona using maps and the internet. Point out that Bedworth is inland, whereas Happisburgh and Barcelona are coastal. Pupils to fill out the comparison sheet and feed their information back to the rest of the class. Pupils to answer the key questions using their notes: What are the similarities and differences between coastal and inland locations? Teacher mark. **Resources needed:** ipads/computers, PPT, various maps of each location, comparison sheet **Key vocabulary:** settlement, village, town, city, coastal, inland, time zone, biome, vegetation belt, topography, landmark, population, similarity, difference, comparison
7	**LI- I can explain how people can damage their environments. (kpi)** **What would the effect of sea level rise and coastal erosion be on Happisburgh?** How could our lifestyle choices affect the coast? Would Bedworth be affected by sea-level rises or coastal erosion? **Review-** What is climate change? What factors might cause climate change? (Link to Year 3 work on deforestation and Year 4 work on fossil fuels) How could our lifestyle choices affect the coast? Ideas might include sea level rise, erosion, habitat destruction, more building, flooding, storms, litter, human disturbance and pollution. Watch the film about global warming- does it mention impacts on coastal regions? Look at sea level rise scenarios for Bedworth and Happisburgh. Could stick in books. How do the images change as sea levels rise? Now think about how erosion damages the coastal environment. Point out that coastal erosion is something that happens naturally, however, human interference along coastlines has resulted in even more erosion along our shore. Buildings, walls, etc. are all built along the coast and beaches. These man-made structures interfere with the natural tides. Sea defences built further along the coast e.g. groynes may stop longshore drift occurring and the beaches in Happisburgh may become depleted. In addition to this, many oceanfront resorts tend to remove seaweed from their beaches to keep them looking pristine. Seaweed is actually a natural buffer from waves and rising tides, and without it the waves have the ability to more intensely sweep more sand out into the oceans. Pupils to draw the position of the current coastline at Happisburgh and the historical coastline (1950 and 1890) using the layers in Digimap for Schools. Pupils can then measure the distances the coastline has retreated at different points along the coast. Pupils to answer the key question to summarise what they have learnt. Peer assessment. **Resources needed:** computers, PPT, Digimap for Schools login **Key vocabulary:** global warming, climate change, fossil fuels, sea level rise, erosion, coastline, sea defences, longshore drift
8	**Assessment:** Complete KWL grid and post-assessment