



MARITIME FUTURES KS3

History

'Whatever happened to Dunwich?'

- Establishment of a port for soldiers (Roman)
- Development of a harbour for trade (Saxon & Medieval)
- The Importance of fishing & shipbuilding in Dunwich's economic development.
- The constant battle against erosion
- The Great Storm of 1286

History

The Battle of Hastings

- Norman crossing the Channel and the need for the perfect weather.
- Strategic importance of the Channel in the defence of the United Kingdom.

History

King John, Medieval England

- The development of Ipswich as a port for trade – impact this would have on development of the town.

Tour of the port

YR7



River cruise



Geography

Fantastic places

- How does the Geography of Venice make it a challenging place to live, but also a place with opportunities?
- Link with Suez Canal, and Felixstowe.

Geography

Rivers

- How have our local rivers shaped our landscape?
- Comparison with flood events in Cumbria and Bangladesh - where do we see flooding in Suffolk and why?

Geography

Natural hazards

- How do tsunamis impact coastal communities?
- Why is Suffolk not at significant risk?



Design & Technology

Lamination unit

- How can finishes preserve a laminated structure in water?

Design & Technology

Model sailing boat

- What makes an effective sail?



Design & Technology

Wooden block and tackle project

- How can we increase force to move a heavy load?



Chemistry

- How do we protect surfaces from oxidation and contamination?
- Surface coating, antifouling, acids/alkali reactions.

Biology

- How are single celled organisms affected by marine pollution? Ballast water - invasive species and pollutants.
- How do plants use rivers and oceans to reproduce and thrive?
- How have animals and plants adapted to conditions in our local environment?



Physics

- What forces are at work on a model sailing boat?
- How is energy transferred in a block and tackle pulley?

Computer Science

- How do people communicate over long distances?
- Encryption and networks: how are semaphore and morse code precursors to modern algorithms?
- Can a BBC Micro be programmed as an automatic SOS transmitter?



YR8