

## Full Steam Ahead - Key Stage 1 Teacher Overview

Use the exclusive schools unlock code (1843SCHOOLS) to open all levels and get unlimited funds.



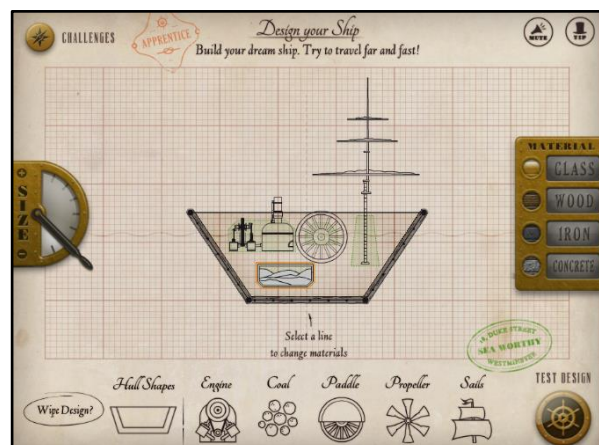
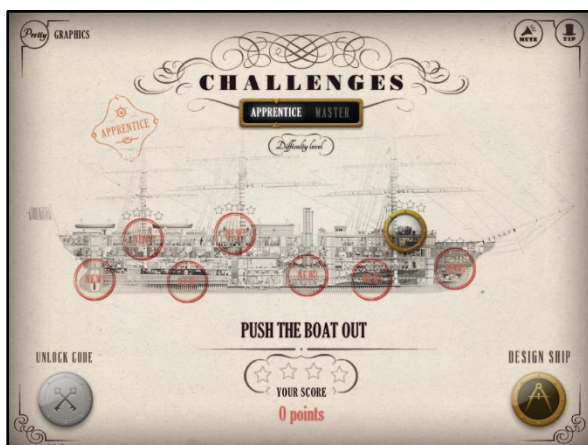
### Art and Design Technology

Level: APPRENTICE

Challenge: PUSH THE BOAT OUT

In this challenge, pupils will need to think like Brunel, to design a ship that can travel far and fast. Using discussion and ICT based skills, your class can generate, design, model and communicate their ideas. Will iron, wood, concrete, or glass prove to be the best material for building a strong ship? How does hull shape and size affect their ship's performance? Which components are essential for speed and stability? Paddle wheel, propeller or sails?

Use your pupils' virtual designs as inspiration, and have fun exploring a range of materials to create their own model ships in class!



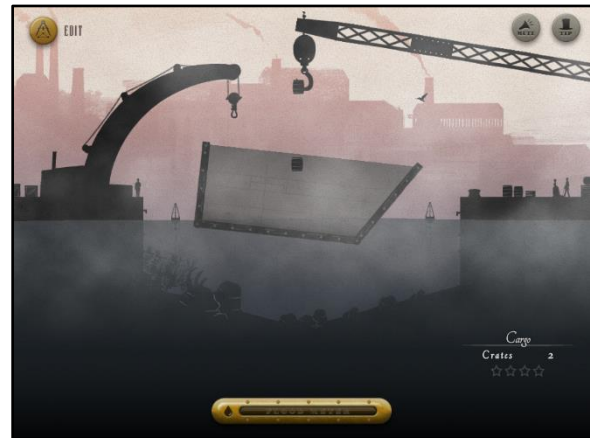
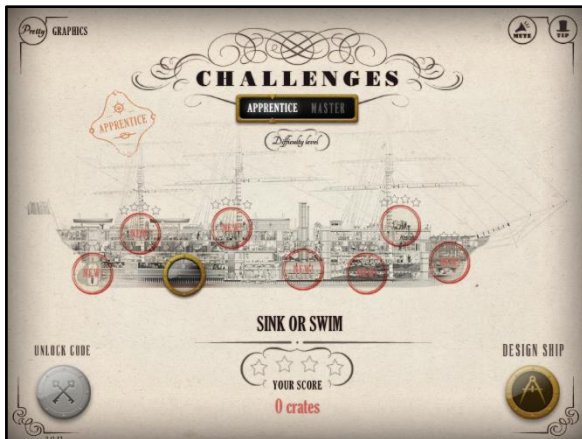
## History

Level: APPRENTICE

Challenge: SINK OR SWIM

Discover how Brunel contributed to national and international achievements using this challenge with your class alongside our [Collection Stories](#).

Use the Victorian back drop of this challenge, alongside the painting of '[The Launch](#)', to compare aspects of life in different periods and discuss significant historical events, people, and places within the Bristol area.



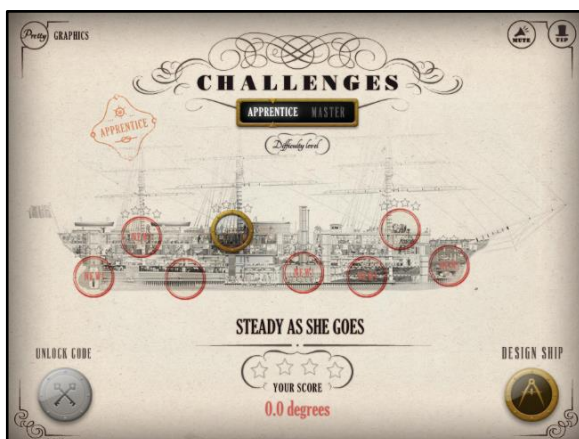
## Maths

Level: APPRENTICE/MASTER

Challenge: STEADY AS SHE GOES

When designing a ship used for transporting passengers, the comfort of people on board - especially those in First-Class - is important to remember! Improving stability will help to reduce seasickness in passengers.

Use this challenge at the Apprentice level to investigate different shapes and identify which are the most stable in water. Switch to the Master level and challenge your pupils further - they can experiment with designing and testing their own hull shapes to discover which is the best.



## Science

Level: APPRENTICE

Challenge: SINK OR SWIM

Explore concepts relating to everyday materials and working scientifically. Challenge your class to think like Brunel and design a ship that can carry the most cargo without sinking. Focus on building a strong hull – shape and material is important. Will iron or wood prove to be the best construction material for your ship? To gain four stars their design must hold 45 crates!

