NAVAL ENGINEERING COMPETITION

Information Pack

The Royal Navy are often involved in disaster relief, together with organisations that support their operations, such as those within UK Naval Engineering, Science & Technology (UKNEST). Recently this has involved rescuing large numbers of people from the sea. UKNEST are looking for young aspiring engineers to come up with innovative ways of achieving this.

"Design a vessel that can rescue 1000 people from the sea"

Aim

This design challenge is part of the Year of Engineering 2018, an initiative aimed at showing young people how rewarding a career in engineering can be. The challenge encourages creativity and innovative thinking – designs can be as abstract as students like!

The challenge aligns with the National Curriculum Key Stages 1, 2, 3 and 4 for both Science and Design & Technology, reflected in our set of objectives:

- Develop an understanding of the **real world application** of scientific knowledge;
- Equip students with the scientific knowledge required to understand the **uses and implications** of science, today and for the future;
- Allow students to develop the **creative expertise** needed in order to participate in an increasingly technological world;
- Build **understanding and skills** in order to solve **real and relevant problems**.

Prizes

Each design will be judged by a group of industry professionals, according to age category (Primary, Secondary, and Further), to allow for the varying levels of detail expected at different ages. The best **three** designs from each age category will all win prizes for the school they represent.

Years 1 – 6	**(Primary)**	iPad
Years 7 – 11	**(Secondary)**	iPad Pro 10.5"
Years 12 – 13	**(Further)**	iPad Pro 12.9"

The winning entrants may also be invited to a prize giving event hosted by the Royal Navy.

Where to start

First things first, come up with the team/vessel name! Here are some questions to help entrants start to imagine what their design will be:

- How can the vessel get quickly to the stranded people?
- How can the vessel get people swiftly from the water?
- How big does the vessel need to be to hold 1000 people?
- What features could help rescue 1000 people?
- How can the vessel take care of the rescued people?

What to make

Designs should be shown on an A3 Poster, with all of the 'Key Design Features' labelled. This can either be done by hand or on a computer, **it's up to you!** Two poster examples are provided on the back page of this info pack.

The vessels shown in the example posters have no imaginative features, and probably wouldn't be very effective at rescuing 1000 people from the sea!

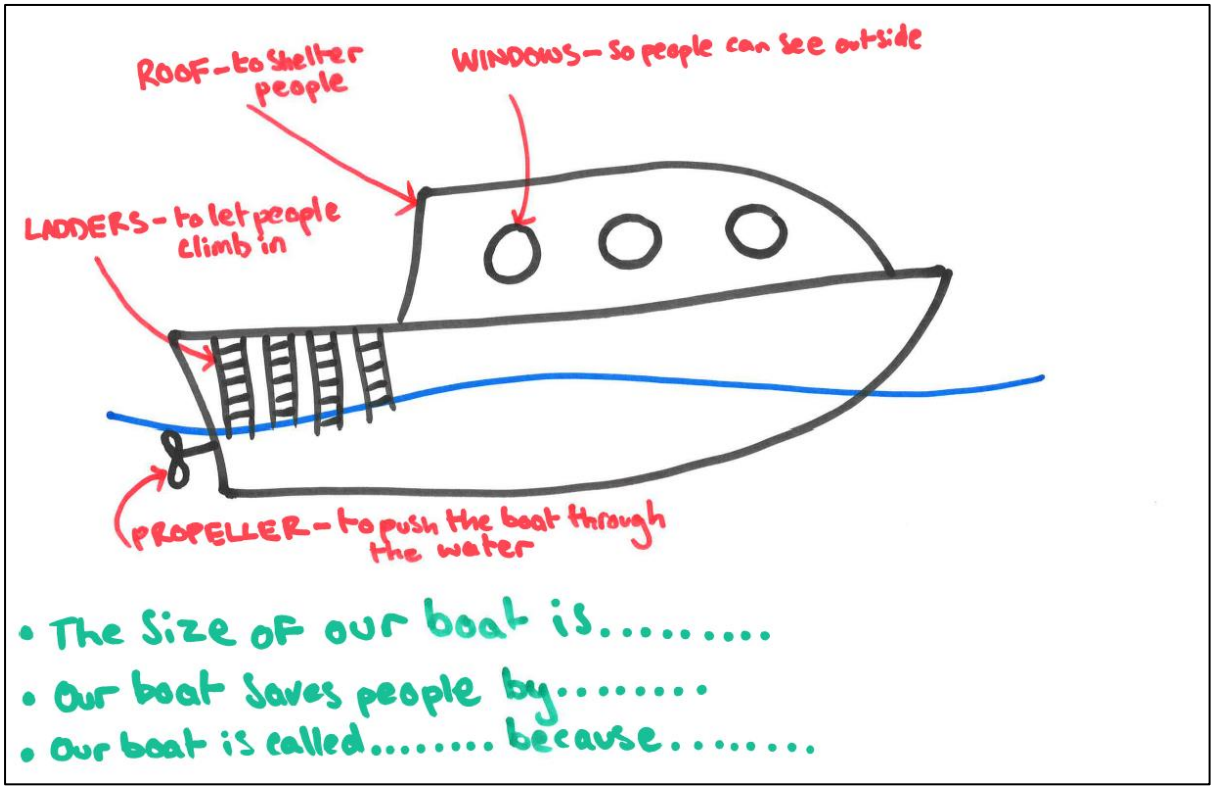
- Some people might not be able to climb ladders and it would take a long time to get everyone out of the water, is there a better way?
- The vessels would have to be really big if it is going to fit all 1000 people on board, is there any way to avoid this?
- They both look like a normal shape for a vessel. Would another shape be better for this kind of rescue mission?

How to submit the design

When entrants are happy with their design, their teacher can submit the poster via our online submission form. If you have made a poster using a computer, it should be sent as a pdf. Hand drawn posters will need to be scanned in before being submitted.

The competition ends on the **1st December 2018**, all designs must be submitted by a school member of staff only to the UKNEST website by this date. Competition T&Cs can also be found on the website.

Primary school example



Secondary school example