



Name Class Date

INEOS TEAM UK is the British Challenger for the 36th America's Cup – the oldest international sporting competition in the world. There are only eleven crew on the boat, but a hundred experts back at the team's base working hard to help INEOS TEAM UK design the most technically advanced and innovative foiling boat to win the America's Cup.

The team use lots of different data to get the best out of the boat and crew in order to give them the best chance of winning. Have a go at the questions below on averages and range.

1 Look at the table below, which tells you the weight of some of the sailors in the crew.

Crew Member	Weight
Ben Ainslie	82 kg
Giles Scott	82 kg
Freddie Carr	95 kg
Graeme Spence	85 kg
Nick Hutton	88 kg

- a Which weight is the mode?
- b What is the range of the sailors' weights?
- c What is the mean weight of the crew? Work through the steps below to help you.

Total weight of crew Number of values Mean weight of crew

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- b What is the median weight? Work through the steps below to help you.

Put the values in order.

Circle the middle value – that's the median!

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2 Here is a list of the top boat speeds recorded each day over 10 days, in metres per second (m/s).

20 m/s	15 m/s	14 m/s	17 m/s	12 m/s	22 m/s	13 m/s	17 m/s	18 m/s	21 m/s
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- a What is the range?
- b Which speed is the mode?
- c What is the median top speed?
- d What is the mean?



Walter Zwiefelhofer – Chief Meteorologist

Not only does he love weather but Walter also skippered two trans-atlantic crossings!

3 Walter, INEOS TEAM UK's Meteorologist, wants to know the most common weather during the America's Cup, so he has gathered details of the conditions off Auckland in the first four days of March for the past three years.

March 2016

Date	Weather
1st	rainy
2nd	calm
3rd	calm
4th	windy

March 2017

Date	Weather
1st	calm
2nd	rainy
3rd	calm
4th	windy

March 2018

Date	Weather
1st	windy
2nd	calm
3rd	rainy
4th	calm

- a What is the modal weather condition in the first four days of June?
- b How do you think this will help the crew perform?