

Whale watching



Read the article in the link below and answer the questions in your work books.

<https://www.mathscareers.org.uk/article/whale-watching/>

What percentage of the blue whale population was wiped out by hunting?

If it is estimated that there are now 55 blue whales in the South Georgia area, how many were there originally?

Several methods have been tried to estimate the population of Blue whales in the world, describe one of these and the associated problems.

Explain how the capture-mark-release method works. (In maths we call this the capture-recapture method).

Describe a possible problem associated with this method.

The table below shows data collected using this method in various places. Use the formula given in the article to calculate the (estimated) missing number of Blue Whales in each area

Location	Number of whales marked in the first capture	Number of whales in the second capture	Number of marked whales in the second capture	Total number of whales in this area?
Mexico	20	15	2	
Maldives	50	70	5	
Iceland	25	9	3	
Quebec		60	21	2000
Canary Islands	100		15	1200