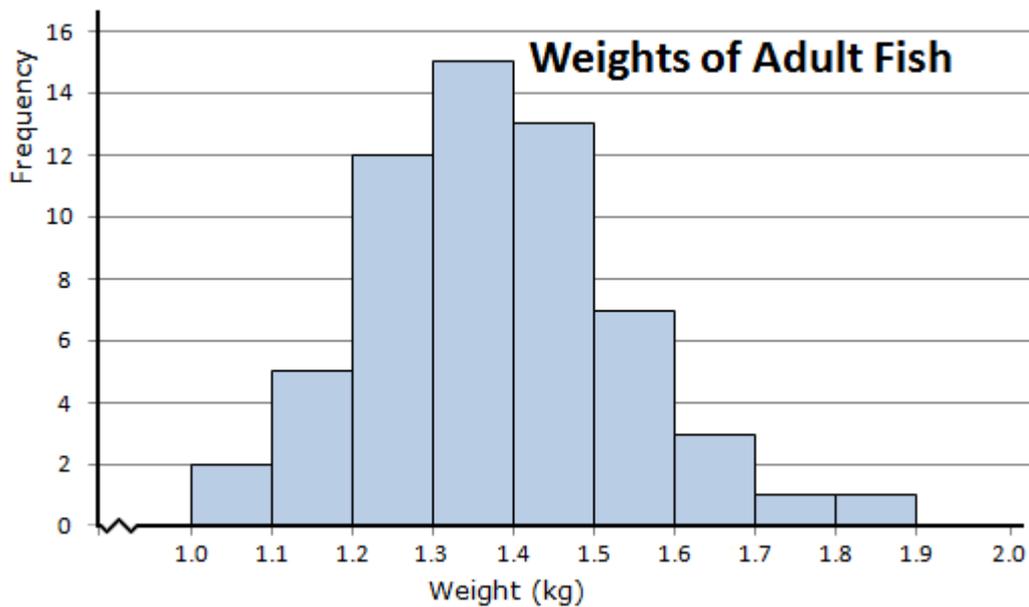


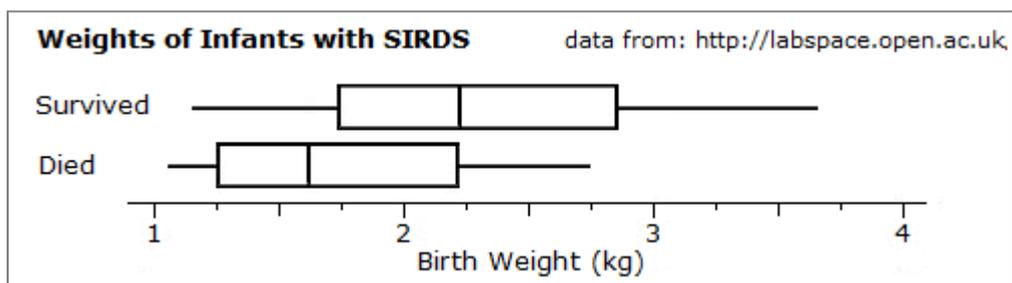
Basic Statistics Practice #5

1. The graph shows the weight of fish caught in a stream:



- What weight was the lightest fish?
- How many fish were over 1.5 kg in weight?
- How many fish were caught?
- What is the median weight of the fish?
- What is the mode weight?

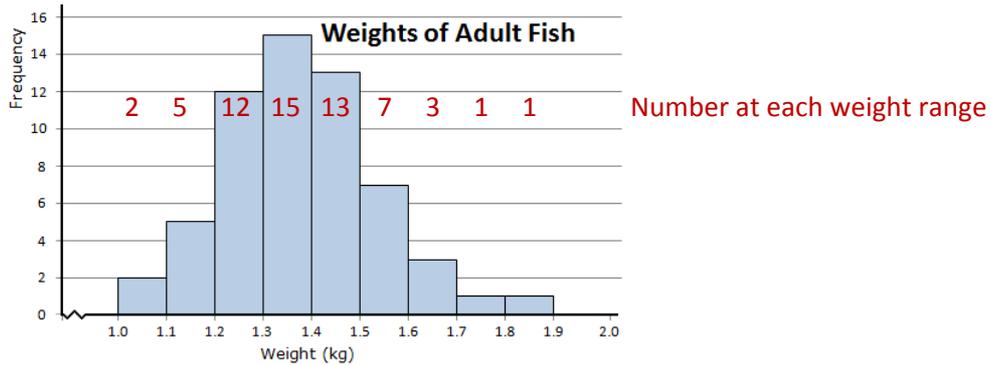
2. A plot of the birth weights of babies born with SIRDS (severe idiopathic respiratory distress syndrome) is shown, divided into those who died and those who did not.



- What weight was the heaviest child who died?
- What is the median weight of those that lived?
- Describe a feature of the difference between the two groups shown.
- How is weight important for infants with SIRDS? Use the graph to explain your answer.

Answers: Basic Statistics Practice #5

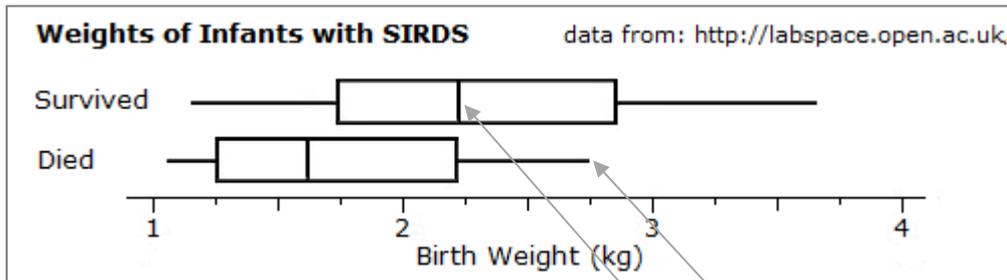
1.



Note: each of the bars represents a range, so many of the questions cannot be answered exactly, but can only be given in ranges or estimates.

- a) What weight was the lightest fish? Between 1.0 and 1.1 kg
- a) How many fish were over 1.5 kg in weight? 12 (7 + 3 + 1 + 1)
- b) How many fish were caught? 59 (the total of all the frequencies)
- c) What is the median weight of the fish? about 1.35 kg (the 30th by weight)
- d) What is the mode weight? Between 1.3 and 1.4 kg

2.



- a) What weight was the heaviest child who died? about 2.75 kg
- b) What is the median weight of those that lived? about 2.25 kg
- c) Describe a feature of the difference between the two groups shown.

The range of weights for those dying is much smaller. Their median is much lower, etc

- d) How is weight important for infants with SIRDS?

All those with the biggest weights survived. The median weight for those surviving is much higher compared to those who died. The conclusion is that babies who weigh more at birth have a better chance of surviving. (Note: as the medians are outside the boxes, it is unlikely to be chance.)