GCSE HIGHER · REVISION MAT 2

Sampling

1 What is a census?

2 Give one disadvantage of a small sample.

3 A survey about sport is done outside a gym.

Explain why the sample may be biased.

4 A company has 150 managers and 600 workers.

A stratified sample of 50 is taken.

How many managers are in the sample?

5 Explain why a random sample reduces bias.

6 60 birds are ringed.

Later, 9 of 45 birds caught have rings.

Estimate the bird population.

7 Explain why a stratified sample can be better than a simple random sample.

8 A club: 84 juniors, 120 adults and 36 seniors.

A stratified sample of 40 is taken.

How many of each?

Mr&Mrs MATHS

ANSWERS · REVISION MAT 2

Sampling

1 A survey of the whole population.

2 It may not represent the population well.

3 People at a gym are more likely to like sport.

4 $\frac{150}{750} \times 50$

10

5 Every member of the population has an equal chance of being chosen.

6 $\frac{60}{N} = \frac{9}{45}$

300

7 It ensures each group is represented in proportion.

8 Total 240

14 juniors, 20 adults, 6 seniors

Mr&Mrs MATHS