91584R



# Level 3 Mathematics and Statistics (Statistics) 2022

91584 Evaluate statistically based reports

Credits: Four

# RESOURCE BOOKLET

Refer to this booklet to answer the questions for Mathematics and Statistics (Statistics) 91584.

Check that this booklet has pages 3–6 in the correct order and that none of these pages is blank.

YOU MAY KEEP THIS SHEET AT THE END OF THE EXAMINATION.

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## REPORT ONE: BBC Good Food Nation - survey looks at children's eating habits

Children want to be more adventurous and try different foods and are keen to cook more at home.

The report asked 1000 parents of children aged 5–16 in the United Kingdom (UK) about their children's attitudes to food, cooking, and eating, now and in the future.



The report has a margin of error of 3.2%.

Adapted from https://www.bbc.co.uk/newsround/58653757 and https://www.bbcgoodfood.com/article/bbc-good-food-nation-survey-results

### **REPORT TWO: Memes as mood boosters**

There's nothing like a good meme to improve your mood. A new study investigating the psychology of how media messages can affect you confirms this.

The 748 participants were split into two groups. The groups viewed either a meme with an image and text or a "non-meme" – the text only with no accompanying image. Participants were then asked to rate their feelings in the moment, along with rating the cuteness and humour of the meme or "non-meme".

# Every good student deserves study breaks!

Figure 1: Meme (image and text)
Source: https://corgicare.com/books-about-corgis/

Figure 2: Non-meme (text only)





From these, a single reliable measure for each participant for each of mean cuteness, mean humour, mean anxiety, and mean positive emotions was formed.

Adapted from: https://doi.apa.org/doiLanding?doi=10.1037%2Fppm0000371

### **REPORT THREE: Companion Animals in New Zealand in 2020**

The results of Aotearoa's largest general survey of pet owners have just been released by Companion Animals New Zealand (CANZ).



### Methodology

Camorra Research conducted online research among a nationally representative sample of adults aged 18 years and older. Quotas were employed using Statistics NZ 2018 Census data to ensure the sample was representative of the NZ household population by age, gender, and region. The total representative sample was 3 599 respondents, which included 2 322 pet owners. An additional boost of 43 horse owners was conducted to bring the total number of horse owners surveyed to 100. Data collection commenced on 7 April 2020, and was completed on 23 April 2020.

†American Veterinary Medical Association; Pet Ownership & Demographic Sourcebook 2018. n = 41622

Adapted from https://www.companionanimals.nz/2020-report