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If Given a Penny Every Time Ferb Says a Word, How Many Cadbury Freddos Could He Buy?

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Abstract

This paper describes and calculates the number of times Ferb, from the Disney animated programme 'Phineas and Ferb', speaks and with this, if given a single English penny for each spoken word, how much money Ferb would have made as a result. It was found that Ferb would gain a total of £25.98. In the year 2000, it was calculated that Ferb could buy 259 Freddos (4403 g of chocolate) with this money, however in 2018 it was found that Ferb could only afford 103 Freddos (1854 g of chocolate) in total. As a result of this, it would be recommended that for better value for money, Ferb travels back in time using their time machine if he ever wishes to bulk buy Cadbury's Freddos.

Introduction

Disney's 'Phineas and Ferb' was an animated television show that was broadcast between 2007-2015, with the programme focussed around the escapades of two step-brothers, Phineas and Ferb, over the course of the Summer holidays to combat boredom. Each episode follows a similar formula, concentrating on a single invention that Phineas and Ferb have designed, with their older sister constantly trying to 'bust' them to their parents and their pet platypus living a life as a secret agent. One constituent of this formula is Ferb's lack of spoken words throughout the series, often being termed a 'man of few words', and on average only speaking one sentence per episode [1].



Figure 1 – Showing Ferb (left) from the Disney channel show 'Phineas and Ferb' and a Cadbury Dairy Milk Freddo chocolate bar (right) [2, 3].

Moreover, ever since the re-release of the 'Freddo' chocolate bar brand in the UK in the 1990's, the rapid rise of the cost of the bar has been informally used as an indicator of inflation and is commonly referenced to as a source of comedy [4]. With these parameters being brought together by using the popular phrase "If I had a penny for every time..." and due to Ferb having a British heritage unlike his step-brother Phineas, it is possible to calculate the number of Freddos Ferb could theoretically buy, if given a penny for each word he spoke. Following this, it can therefore be recommended whether or not using their time machine (as seen in the S01E21 episode "It's About Time!" [5]) is a viable solution, as both the mass and the cost of a Freddo have changed since the year 2000. To do this, as spoken language is slightly more 'complex' than written language, definitions of what counts towards the total needs to be set.

Assumptions

When counting the number of words spoken by Ferb throughout all 222 aired episodes, a number of boundaries need to be set:

- Only spoken words count towards the total (i.e. singing words *do not* count)
- Only English words
- Words spoken during the credit scene *do* count (as each credit scene does vary from one another)

- Phonetics of abbreviated words *do* matter (i.e. if a word is pronounced as 'we'll' instead of 'we will', this counts as a single word rather than multiple)
- Filler words *do* count (i.e. 'ah', 'umm', 'err')

Calculations

Throughout all episodes, considering the boundaries stated above, the number of individual spoken words was counted to be 2598 [6]. If given a penny for each of these words, Ferb would receive the equivalent of 2598p, or £25.98. As of March 1st 2019, the price of a single Freddo chocolate bar is 25p across most major retail stores [3]. With this, it is possible to calculate the number of Freddos Ferb could buy:

$$\frac{2598}{25} = 103.92 \text{ Freddos}$$

In the modern day, Freddos are 18 grams (g) each [4, 7]. Therefore, a total mass of Freddo chocolate can also be calculated:

$$103 \times 18 = 1854 \text{ g}$$

In contrast to this, in the year 2000 when the bar cost 10p and had a mass of 17 g [4], Ferb could buy:

$$\frac{2598}{10} = 259.8 \text{ Freddos}$$

Which results in a total mass of:

$$259 \times 17 = 4403 \text{ g}$$

As a result, even when taking into account the mass difference of the chocolate bar between the year 2000 and 2019, it is clear that the chocolate bar was far better value for money in the year 2000. Overall, it is clear even with the mass difference in the chocolate bar being taken into account, Ferb would be much better using the time machine to save money on classic Cadbury's British chocolate.

Conclusion

In conclusion, Ferb speaks a total of 2598 words in 222 aired episodes of '*Phineas and Ferb*'. If given an English penny for each word, then in the modern day Ferb could buy a total of 103 Freddos (1854 g), but back in the year 2000, when Freddos cost 10p rather than 25p, Ferb could have bought up to 259 Freddos (4403 g). As Phineas and Ferb have previously built a time machine, it is suggested that if the two step-brothers wish to buy Freddos, travelling back to the year 2000 would greatly benefit their total chocolate intake.

References

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