Nouns, verbs, and adjectives used to express measurements?

1. <u>Nouns used to express "Measurements":</u>

There are a variety of nouns used to express measurements speech. The writer must choose appropriate noun that match to the kind of information he's dealing with (*see table below*). Other nouns are related to the scientific act of measuring, likewise, check, study, and survey.

Countable	Statistical	Geometrical
• amount • extent •	• accuracy • average • level	• area • circumference •
• measurement • range •	• mean • rate • scale •	• cross-section •
• size • span • speed •	• stage • step • proportion •	• diameter • radius
• degree • quantity •	•Standard Deviation •	• volume •

Rules for noun formation from adjectives and verbs

When the absolute measure -of something- is not known and we want to construct an idea about its relative dimension; the use of nouns formed from adjectives that described those things remains beneficial.

Adjective + (- <i>th/-t</i>) (+ VOWEL CHANGE)	Adjective+(-ness)
deep 🕩 depth	hard 🕩 • hardness
high 🕩 height	heavy 🕩 heaviness
long 🕩 length	near 🕩 nearness
••• weight	thick 🕩•thickness
wide 🕩 • width	

Examples :

- "the depth of polystyrene wells was adapted to fit small volumes"
- *"the wall thickness of Gram-negative bacteria is larger than Gram- positive and it is essentially related to LPS composition".*

2. Verbs used to express "Measurements":

Verbs are used to express "the action of measure". It has different structures.

to + Noun/adj + Ø	to + Noun/adj + <i>₋en</i>	to + Noun/adj + -adv particle
• to narrow ≠ to thin	• to deepen	• to slow down
• to range=to span=to extend	 to lengthen 	• to speed up
• to rate=to check= to monitor	• to shorten	• to extend over
 to record = to plot 	• to thicken	• to level off

Examples :

- *"The distribution of positive cases during the last 6 months was plotted on a graph"*
- "The speed of the neutrons is slowed down by the beryllium moderator."

3. Adjectives used to express "Measurements"

deep ≠ shallow • far ≠ near • fast ≠ slow • heavy ≠ light • high ≠ low • long ≠ short

• odd \neq even • thick \neq thin • wide / broad \neq narrow

Examples from scientific articles:

The high concentrations of erythritol in uterine tissues, and the ability of *B. abortus* to utilise this rare sugar, suggest that it may be a determinant for the tissue tropism of this pathogen in cattle (36).

As it was estimated in other studies, the detection capacity is about 10 to 100fg of DNA.²⁰

RESULTS

Antibacterial effect of QA NPs on E. coli strain ECDCM1

Since QA NPs were synthesized with the raw material Qe and Ag NPs, the survival rates of *E. coli* strain ECDCM1 exposed to Qe and Ag NPs were firstly detected. As shown in Figs. 1A and 1B, Qe and Ag NPs did not affect the survival rates of *E. coli* strain ECDCM1 at concentrations of 0.5 μ g/mL, 1 μ g/mL, and 5 μ g/mL; and when the concentrations of Qe and Ag NPs reached 10 μ g/mL, the survival rates of *E. coli* strain ECDCM1 were approximately 74% and 52%, respectively, compared with the control group without exposure to Qe or Ag NPs. However, except for the 0.5 μ g/mL concentration of QA NPs, the survival rate of *E. coli* strain ECDCM1 decreased accordingly with the increase of the concentration of QA NPs, and when the concentration of QA NPs reached 10 μ g/mL, the survival rate of cells dropped to 0%. These data indicated that QA NPs had a higher antibacterial activity against *E. coli* strain ECDCM1 than Qe and Ag NPs. When subjected to a concentration of 0.0125 mg/mL, on average the isolates had higher optical density values when compared to the positive control (p < 0.001) (Fig. 1). For the other concentrations, the OD's did not differ in comparison with the positive control (p > 0.05) (Fig. 1).