The aim of this assessment is to provide the opportunity for you to:

- develop a chain of reasoning that will enable you to estimate quantities to an appropriate degree of accuracy
- choose suitable units for your estimate
- communicate the assumptions upon which your estimate is based.

1. Heartbeats

How many times does a person's heart beat in a lifetime?

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2. Crowded Tennis (or football)

How many people could comfortably stand on a tennis court? (or, if you prefer, a US football field?)

Assumptions

Reasoning

3. Mummies

An unraveled toilet roll is 33 meters, or 100 feet long.

Will one toilet roll be enough to wrap a person?

Describe your reasoning as fully as possible.

Assumptions
4. The Train Journey

I met Dodge on an Amtrak train in Union Station, Washington, in January of 1993. He came into an empty car and sat beside me, explaining that the car would before long fill up. It did. He didn't know me from Chichikov, nor I him...Two hundred miles of track lie between Union Station and Trenton, where I got off, and over that distance he uttered about forty thousand words. After I left him, I went home and called a friend who teaches Russian literature at Princeton University, and asked her who could help me assess what I had heard,...

How many words do you think you could speak, at normal conversation speed, during a 200 mile train journey? (Hint: You could start by timing yourself reading the article).

Hence decide if the statement 'he uttered about forty thousand words' is reasonable.