



ESTIMATION

**FROM 'WHEN NEAR ENOUGH IS GOOD
ENOUGH' BY TRACY MUIR**

ESTIMATION IS USEFUL

- Part of everyday life
- Often don't need to be exact when measuring
- Brainstorm a list of times when you and your family and friends have used estimation rather than measuring with an instrument



ESTIMATION IS RELATED TO REAL LIFE

- People use estimation in their work:

It saves them time

It shows that a method or an instrument is working

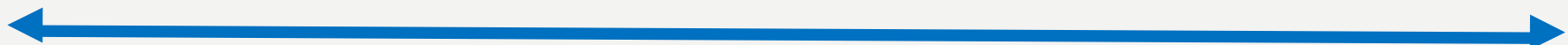
Exact measurements are not always needed



ESTIMATION SAVES TIME

- What would the world be like if everything had to be measured exactly?
- Strategy: identify the upper limit and the lower limit

Lowest
possible



Highest
possible

ESTIMATION SHOULD BE PURPOSEFUL AND RELEVANT

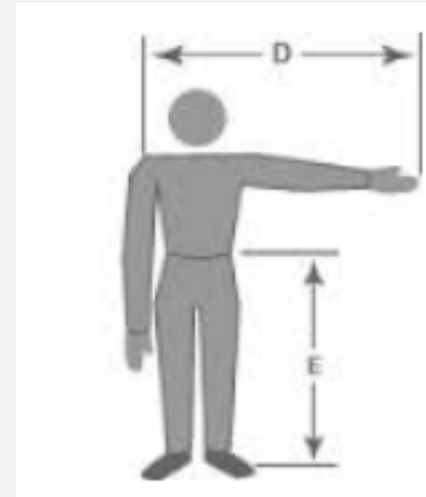
- There needs to be a reason to find an estimate
- Not usually necessary to estimate then measure



ESTIMATION IMPROVES WITH PRACTICE

- Estimation Talks help practise your estimation
- Learn new strategies for estimating

PERSONAL BENCHMARKS ARE USEFUL FOR ESTIMATION



- Develop personal benchmarks
- About how long is your foot? Your arm? About how tall are you? About how wide is one finger? What is about 1 metre on you? What is about 1 cm? 10cm?

OVERESTIMATING AND UNDERESTIMATING

- Think of examples of when we use estimation.
- Now decide for each one if it's better to overestimate or underestimate, e. g. when estimating how much paint you need to paint a room, it is better to overestimate



ESTIMATION IS USEFUL FOR CHECKING EQUIPMENT

- e.g. making reasonable estimations of temperature or mass help you to know if equipment like thermometers or scales are working

