

Estimation station and class survey for CBSE Class 9 and 10

CBSE Math Revision · CBSE Class 9 and 10 · Student sheet

Name _____

Class _____

Date _____

No calculator. Every answer works out exactly.

Starter (5 minutes)

1. Estimate 49.8×20.3 by rounding each number first.
2. Estimate $(612 + 389) \div 4.9$.
3. A student estimates that a corridor is 30 m long. It is really 24 m. By what percentage of the true length was the estimate out?

Main activity (35 minutes)

Task A: Estimation station

At each station, write your estimate first, then measure. These are one group's results.

- a. A student estimated that a desk is 90 cm long. It measured 120 cm. By what percentage of the true length was the estimate short?
- b. Five estimates of the number of beads in a jar were 150, 210, 180, 260 and 200. There are 196 beads. Find the mean of the estimates. How far is it from 196?
- c. Ten estimates of the length of the classroom, in metres, were 8, 9, 10, 10, 11, 12, 12, 12, 13, 13. Find the mode and the median.

Task B: Class survey: travel times

Made-up data: 25 students recorded how long their journey to school takes.

Time (minutes)	Number of students
0-10	6
10-20	9
20-30	7
30-40	3

- Find the mean journey time using the class marks.
- Find the median journey time.
- Find the mode of the journey times.

Task C: Hand spans

Made-up hand spans (cm) of 10 students: 18, 20, 19, 22, 21, 17, 20, 23, 19, 21.

- Find the mean and the range.
- Find the median.

Extension

- Two more students join the hand-span survey, with spans of 16 cm and 24 cm. Find the new mean and the new range.