

GENERAL MATHEMATICS - FOUNDATION Level 2

Common Assessment Task

Work Requirements:

Conduct a statistical investigation

Assessment Type:

Assignment

Criteria being assessed:

- Criterion 7 - elements 1, 2, 4, 5, 6 and 7

Suggested conditions:

- This task should take learners 2.5 hours.
- Learners should submit a handwritten or word-processed response.
- This task requires an individual response by each learner.

Task Description:

Learners will participate in the Sticky Tape Challenge.

In this challenge:

- each person has 45 seconds to tear off 16 pieces of sticky tape from a dispenser.
- each piece should be as close to 60mm as possible.
- stick pieces on a blank sheet of paper and measure them.

The winner of the challenge is the person who is the most accurate in tearing off 60mm pieces of sticky tape.

Learners will work in groups of three to collect data, one tearing the tape, one to hold the dispenser and one to act as a timer.

What you need to do:

Use your knowledge of statistics (mean, median, mode, IQR, Boxplots) to answer the following questions:

1. Discuss amongst your group:
 - how you will perform the challenge
 - what measurements you will take

- what format you will record the measurements in.
2. Who is the most accurate in your class? What statistic will convince the class you are right?
 3. Who are more accurate, the youngest half of the class or the oldest half? How can you compare two groups using a statistical measure?

(Source: Adapted from Lesson idea originally presented by Anthony Harradine, Prince Alfred College, circa 2005.)

Teacher use only - What needs to be submitted for assessment?

Learners respond to the questions in a separate document, clearly identifying each question.