

TI-15 Explorer™

How Do You Measure Up?



This Unit includes:

• Teacher Notes & Lesson Overview

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• Teacher PowerPoint

PPT

• Worksheets 1, 2, 3 & 4

W

• Student Assessment Task

AT

- Please note due to the nature of both the activities in the Worksheets and Assessment Task there are no set solutions.

To obtain the complete set of units available please email teacher-support@list.ti.com

 **TEXAS
INSTRUMENTS**

Your Passion. Our Technology. Student Success.

Year 7 Working Mathematically, Measurement/Chance and Data

Statement of Learning Opportunities

- Calculate measures of location (mode, median and mean) and discuss their usefulness in context
- Choose and use sets of things, lists, tables, diagrams and graphs to represent, interpret and analyse data, relations and functions

Key Ideas

- Mean, mode and median can be used to describe a set of data or the characteristics of a group
- By generating and analysing data students are more likely to develop a sense of what 'typical' is
- Data organised in different ways may tell us different things
- Data can be summarised using diagrams, tables and graphs to show frequencies for different categories
- New questions may require data to be reorganised in a different format
- The use of the calculator removes the pressure of tedious calculations and allows students to think
- Appropriate mathematical language needs to be used to summarise features of data

Key Vocabulary

Mean mode median average typical height. Data ascending descending sort summarise graph frequency table list common range baseline line plot variations common middle classification categories sequence possibilities variable digit palm hand cubit standard and non-standard units of measure hand span length estimate similar

Lesson Overview

- i) Task 1 – Class Photograph
- ii) Task 2 – What is the Average Height of Your Group?
- iii) Task 3 – Our Typical Height
- iv) Task 4 – What a Record! Worksheet included
- v) Task 5 – How Many Hand Spans? Worksheet Part 1 and 2

Equipment

TI-15 Explorer™ calculator, paper tape, string, tape measures, height measure, copies of worksheets outlining tasks, student guides for identified function keys in teachers PowerPoint.

Sequencing

Extract frequency data from lists and one way tables. Represent data in simple tables and graphs. Summarises data based on one-to-one representation of data.

Able to collect, classify, sequence and tabulate data in order to answer questions. Data is displayed and summarised using frequencies, measurements and many one-to-one correspondence between data and representation.

Read frequency and other types of information from a range or tables/graphs created. Able to summarise data with highest, lowest and middle scores and mean.

Indicators of Success

Students can:

- Use the mean, median and mode to describe a set of data
- Collect, organise and record data to answer questions
- Summarise data in diagrams, tables and graphs to show frequencies for different categories
- Use the memory function on the calculator to add products to find the mean
- Make appropriate use of the calculator for general calculations involving decimal and whole numbers
- Use appropriate mathematical language to share their ideas, estimates, observations and findings in relation to data

Refer to teacher PowerPoint for assessment ideas