Creating and Reading Frequency Tables Explained

KS4 MATHEMATICS STATISTICS Ages 11-16 ⏰ 3 min read

What is a Frequency Table?

A **frequency table** is a simple tool that helps you organize information and count how many times things happen. Instead of writing down a long list of numbers or observations, you create a table that shows each item and how many times it appears. This makes data much easier to understand at a glance.

For example, imagine your class votes on their favourite fruit. Instead of listing "apple, banana, apple, apple, orange, banana," a frequency table would show apple appears **3 times**, banana appears **2 times**, and orange appears **1 time**.

Think of it like sorting your toy collection into groups. Rather than leaving toys scattered everywhere, you put all the cars together, all the action figures together, and count how many you have in each pile.

How to Create a Frequency Table

Creating a frequency table takes just a few steps. First, collect your data—this could be anything: test scores, colours of cars passing by, or types of weather. Second, list all the different categories or values in the first column. Third, use tally marks (little lines in groups of five) to count how many times each item appears. Finally, write the total count as a **number** in the **frequency column**.

Let's say you record the weather for **20 days**: sunny appears **8 times**, cloudy appears **7 times**, and rainy appears **5 times**. Your table would have these exact numbers, and they should always add up to your total count.

Think of it like taking a register at school. You go through the list of names and check who is present—that's your frequency for each student.

How to Read a Frequency Table

Reading a frequency table is straightforward. Look at the first column to see what categories exist. Then check the **frequency column** to see the count for each

category. The **highest number** tells you which item appeared most often, and the **lowest number** tells you which appeared least often.

You can also use frequency tables to answer questions. If a table shows **15 students** like pizza and **8 students** like pasta, you know more students prefer pizza. You could even work out percentages or create a bar chart to show the information visually.

Frequency tables are used everywhere—shops track sales, doctors record symptoms, and scientists count observations. They turn messy data into organized, understandable information that helps us make decisions.