

End-of-year review: data, chance and algebra; maths-journal reflection

CURRICULUM ALIGNMENT

DAT.DAT.3

pose questions of interest and collect, display and critically analyse data in a range of ways for a range of purposes and communicate the findings.

ALG.EXP.3

represent and express problems with known and unknown values in different ways to include the use of appropriate letter-symbols or words.

INTERACTIVES

Bar Chart Builder · display

Balance Scales · challenge

WHAT THIS LESSON TEACHES

The mode is the value that comes up most often in a set of data: the tallest bar or the longest tally row. A box or a letter can stand for a missing number in a sum so both sides balance.

→ If most of the class chose hurling, then hurling is the mode of the favourite-sport chart.

→ In $\square + 7 = 12$, the box must be 5 so both sides equal 12.

MODEL THIS ON THE BOARD

MODE AND MISSING NUMBER ON THE GAA CHART

- 1 Read the tallies: Football IIIII, Hurling III, Camogie II.
- 2 Football has the longest row so the mode is **Football**.
- 3 Solve the balance $\square + 7 = 12$: the box must be **5** because $5 + 7 = 12$.

DISCUSSION STARTER

REFLECT

What is one algebra idea you understand better now than in September?

ANSWER KEY

c) 8

Q1: Football

Q2: 5

Q3: 10

Q4: 6

Q5: 12

a) Always : The mode is always the value that appears most often, shown by the tallest bar.

b) Always : The longest tally row shows the most common choice, which is the mode.

c) Never : Mode means most frequent, not the biggest value.

d) Never : Equal tallest bars mean there is no single mode.

EXTENSION SHEET · STRETCH ANSWERS

S1: 11

S2: 6

S3: 8