

Reading a block graph: the tallest tells the most

CURRICULUM ALIGNMENT

DAT.DAT.2

pose questions of interest, record and use data as evidence to answer those questions and communicate the findings.

INTERACTIVES Bar Chart Builder · challenge, display

WHAT THIS LESSON TEACHES

A block graph is made of towers of blocks. Each tower stands for one group and each block stands for one, so the tallest tower shows which group has the most.

→ A tower of 6 blocks for Walk means 6 pupils walk to school.

→ If Walk has 6 blocks and Bus has 2, Walk is the tallest tower and has 4 more than Bus.

MODEL THIS ON THE BOARD

HOW WE TRAVEL TO SCHOOL

- 1 Look at the finished block graph with towers for Walk, Car and Bus.
- 2 Count each tower: Walk has 6 blocks, Car has 4 blocks and Bus has 2 blocks.
- 3 Walk is the tallest tower, so most pupils walk to school.
- 4 The 4 blocks that stick up above Bus show Walk has 4 more than Bus.

LESSON ARC

Open with the finished travel block graph on the IWB and take hands-up guesses for the tallest tower before any counting. Model running a finger up each tower on the travel and pet graphs, naming tallest, shortest, and the blocks that stick up as how many more. Read the fruit graph together at the board, then three copybook lines from it. Class Challenge is the lunch graph under teacher direction. Student Activity Book page 118 is the practice hand-off.

TEACHING MOVES

1. **Getting Started.** Show the finished travel graph only. Take three hands-up answers for tallest tower and most-travelled way. Hold the graph still — do not count the blocks yet; that is the model beat.
2. **Watch and Notice.** Run a finger slowly up Walk 6, Car 3, Bus 2. Name tallest and shortest, then point to the four blocks on Walk that stick up above Bus and count them aloud. Repeat the same moves on the pet graph: Dog 5 tallest, Fish 1 shortest, four extra blocks. Push for tower name plus number.
3. **Try It Together.** Fruit graph stays up. Invite three pupils in turn at the board: tallest name and votes, shortest name and votes, then how many more Banana has than Apple by pointing to the three extra blocks. Class agrees or corrects out loud before Check — reading, not building.
4. **Write the tallest tower.** Keep the fruit graph visible. Pupils write three lines in the copy: tallest name (Banana), block count (7), how many more (3). Walk the row glancing only — whole-class copybook practice, not marking.
5. **Class Challenge.** Lunch graph practice. Pupils take turns at the board; check each answer as you go and keep the pace brisk. If someone counts category labels, revoice: run your finger up the blocks only. After the bank, move to Student Activity Book page 118.

6. **What Did We Notice?** Ask why Pasta got the most. Listen for height linked to count — more blocks means more votes. Revoice: the tallest tower has the most blocks, so that answer won. Head off judging by bar width or label length.

COMMON MISCONCEPTIONS

⚠ Pupils count the category labels under the towers instead of the blocks, so Sandwich might be read as 1 because the word is there.

Stop and revoice: run your finger up the blocks only. Trace Sandwich block by block with the class until the count matches the tower height.

⚠ Pupils pick the tallest tower by the longest word or the widest bar, not by block count — Yoghurt wins because the label looks bigger.

Cover the labels briefly and ask which tower is tallest from height alone. Uncover and count blocks together so height, not label size, decides.

⚠ For how many more, pupils recount the whole taller tower or subtract the wrong way (2 from 6 becomes 6 take away something muddled).

Point only to the blocks that stick up above the shorter tower and count those extras aloud. The gap is the how-many-more, not a fresh full recount.

DIFFERENTIATION

EMERGING

- Stay on tallest and shortest only — name the tower and count its blocks. Leave how many more for teacher-table support with the same lunch graph.
- Pre-point the first block on each tower so pupils only continue the count rather than finding where to start.

DEVELOPING

- After the copybook three lines, ask: if one more pupil chose Apple, would Banana still be tallest? By how many?
- On the lunch graph, add a silent think: how many more Sandwich than Yoghurt — then check the sticking-up blocks together.

PROFICIENT

- Once the Class Challenge answers are confirmed, ask: invent a fourth lunch tower that would make Pasta no longer tallest — how many blocks must it have, and why? Copybook one sentence.

✂ **Cross-curricular:** Link to SPHE travel-to-school talk — class already knows Walk, Car, Bus from the opening graph.

ANSWER KEY

b) 7

c) 6

Q1: Car

Q2: Banana

Q3: Yoghurt

Q4: 5

a) **Always** : Each block stands for one, so more blocks means more in that group.

b) **Always** : Six blocks make a higher tower than two blocks.

c) **Never** : The shortest tower shows the least, not the most.

d) **Sometimes** : This is true only when those towers tie for the highest count.

EXTENSION SHEET · STRETCH ANSWERS

S1: 29

S2: 4

S3: 1

S4: 35