

Filtering data by Values

Unit: Data Analysis and Representation (Google Sheets) - Student Practice Worksheet

Overview: Anaya's finger was already on the Delete key. Kabir grabbed her wrist. "Wait — should we? Those are the library's only records." Pixel's fan made a long, worried noise.

Practice Questions (30 Total)

Section A - Easy

Q1. What appears in each header cell when the filter is on?



funnel in the header

- ☐ A. A star icon
- ☐ B. A funnel icon
- ☐ C. A paint bucket
- ☐ D. A tick box

Q2. Which menu path switches a filter on?

- ☐ A. Format ■ Filter
- ☐ B. Insert ■ Filter
- ☐ C. Data ■ Create a filter
- ☐ D. File ■ Filter rows

Q3. Unticking a value in Filter by values means those rows are...

- ☐ A. hidden
- ☐ B. deleted
- ☐ C. sorted
- ☐ D. copied

Q4. The row numbers on the left skip from 2 to 5. What does that tell you?

2 3 4 5

skipped numbers = hidden

- ☐ A. Rows 3 and 4 are still there, just hidden
- ☐ B. Rows 3 and 4 were deleted
- ☐ C. The sheet has a typing mistake
- ☐ D. Row 5 has been duplicated

Q5. When Ms. Rao turns on a filter, does any of the library's data get deleted?

- ☐ A. Yes, unticked rows are deleted
- ☐ B. No — filtering never deletes data
- ☐ C. Only the Copies column is deleted
- ☐ D. Only rows below row 5 are deleted

Q6. Anaya ticks the value 5 back on in the Class filter. What happens to the Malgudi Days and Cricket Stars rows?

- ☐ A. They become visible again
- ☐ B. They are deleted from the sheet
- ☐ C. They get copied into a new column
- ☐ D. Their copies count changes

Q7. What does the list inside 'Filter by values' show you?

- ☐ A. Every formula used in the column
- ☐ B. The total of all the numbers in the column
- ☐ C. Every different value found in that column
- ☐ D. Every row that has been deleted

Q8. Which best describes a 'hidden row'?

- ☐ A. A row with no data in it
- ☐ B. A row still in the sheet but not shown on screen
- ☐ C. A row that has been permanently removed

- ☐ **D.** A row that has been moved to a different tab

Q9. Name a way to bring back rows that a filter has hidden.

- ☐ **A.** Retype the missing rows from memory
- ☐ **B.** Ask the librarian for a new sheet
- ☐ **C.** Sort the column alphabetically
- ☐ **D.** Tick the value again, or turn the filter off

Q10. After Class 3 and Class 5 rows are hidden, what happens to the numbers inside those hidden rows, like Malgudi Days' 3 copies?

- ☐ **A.** They double automatically
- ☐ **B.** They get deleted
- ☐ **C.** They move into the Class 4 rows
- ☐ **D.** They stay exactly the same, just out of view

Section B - Medium

Q11. Only the value 4 is ticked in the Class funnel. Which books are visible?

Panchatantra 4

Space Facts 4

Ant Diary 4

- ☐ **A.** Malgudi Days, Rainbow Rhymes, Cricket
- ☐ **B.** All six books stay visible
- ☐ **C.** Rainbow Rhymes only
- ☐ **D.** Panchatantra, Space Facts, Ant Diary

Q12. Anaya deletes the other rows instead of filtering. What is the real problem?

- ☐ **A.** The Class 3 and 5 books are gone for good
- ☐ **B.** The funnel icon disappears from view
- ☐ **C.** The row numbers stop counting upwards
- ☐ **D.** The copies column turns into text

Q13. With that same filter on, how many rows are hidden?

- ☐ **A.** None
- ☐ **B.** Two

- ☐ C. Three
- ☐ D. Six

Q14. Only the value 5 is ticked in the Class funnel. Which books are visible?

Malgudi Days 5
Cricket Stars 5

- ☐ A. Malgudi Days and Cricket Stars
- ☐ B. Panchatantra, Space Facts, Ant Diary
- ☐ C. Rainbow Rhymes only
- ☐ D. All six books

Q15. The concept text compares filtering to wearing sunglasses. What is that comparison mainly trying to say?

- ☐ A. Filtering makes the sheet prettier to look at
- ☐ B. Filtering is difficult to switch off
- ☐ C. Filtering changes the actual numbers stored
- ☐ D. Filtering changes only what you see, not what's real

Q16. With only Class 5 ticked, how many copies are visible in total?

- ☐ A. 13
- ☐ B. 7
- ☐ C. 21
- ☐ D. 28

Q17. With only Class 3 ticked, what do the visible row numbers read?

3	visible row numbers
---	---------------------

- ☐ A. 2 only
- ☐ B. 4 only
- ☐ C. 2, 5, 7
- ☐ D. 3, 6

Q18. If Anaya ticks every value in the Class filter (3, 4 and 5), what happens?

- ☐ A. The sheet becomes empty
- ☐ B. All six rows are visible again
- ☐ C. Only Class 4 rows stay visible
- ☐ D. The filter deletes itself permanently

Q19. Kabir wants to see every book with fewer than 4 copies. Which values should he tick in a filter on the Copies column?

- ☐ A. 4 and 5
- ☐ B. 6 and 8
- ☐ C. 2 and 3
- ☐ D. 3 and 4

Q20. Which is a way to filter that does NOT touch the Class column at all?

- ☐ A. Filtering Copies to show only values above 5
- ☐ B. Unticking 3 in the Class funnel
- ☐ C. Ticking only 4 in the Class funnel
- ☐ D. Ticking only 5 in the Class funnel

Section C - Challenge

Q21. With only Class 4 ticked, the visible Copies total is 13 and the full list totals 28. What explains the 15-copy difference?



- ☐ A. The total copies in the three hidden rows
- ☐ B. A calculation error in the sheet
- ☐ C. Copies that were deleted from the sheet
- ☐ D. The number of columns in the table

Q22. Kabir says a filter changes the underlying data; Anaya says it only changes what's on screen. Which piece of evidence best proves Anaya is right?

- ☐ A. The funnel icon appears in the header row
- ☐ B. Re-ticking a hidden value restores that row's exact data

- ☐ C. The Filter by values panel has tick boxes
- ☐ D. The sheet is called Google Sheets

Q23. If the three Class-4 rows had actually been deleted instead of filtered, what would the remaining row numbers look like?

- ☐ A. 2, 5, 7 — the same as filtering
- ☐ B. They would stay exactly as they are now
- ☐ C. 2, 3, 4 — counting up with no gaps
- ☐ D. 1, 2, 3 — starting from the header

Q24. Kabir hides Class 3 and Class 5 using the funnel, then also unticks the value 5 in a filter on the Copies column. Which books remain visible?



two funnels at once

- ☐ A. Space Facts only
- ☐ B. Panchatantra and Ant Diary
- ☐ C. Panchatantra, Space Facts, Ant Diary
- ☐ D. All six books

Q25. A classmate says turning off the filter entirely gives the same end result as ticking every value back on. Is that true?

- ☐ A. Yes — both leave every row visible again
- ☐ B. No, turning off the filter deletes the funnels forever
- ☐ C. No, ticking every value only works for Class
- ☐ D. Yes, but only after adding a new row first

Q26. Suppose you want to find books that belong to Class 4 OR have more than 5 copies, using only one filter column. Why can't a single Class filter do this alone?

- ☐ A. The funnel icon only appears once per sheet
- ☐ B. Google Sheets does not allow filtering the Class column
- ☐ C. Filtering always deletes the Copies column
- ☐ D. Filter by values only filters one column's own values

Q27. In which situation would checking the row numbers help confirm no data was lost?

2 ... 5 ... 7

gaps mean still there

- ☐ A. After typing a new formula in a blank cell
- ☐ B. After fewer rows show following a filter action
- ☐ C. After changing the header row's font color
- ☐ D. After renaming the sheet tab

Q28. Anaya wants Class 4 books that have MORE than 3 copies. She ticks only 4 in the Class funnel. Is this enough by itself?

- ☐ A. No — she still needs to also check the Copies column
- ☐ B. Yes, because Copies and Class are the same column
- ☐ C. No, because ticking 4 hides all Class 4 books
- ☐ D. Yes, low-copy rows are removed automatically

Q29. A student argues that saving and closing the sheet while a filter is on must delete the hidden rows, since they're not shown. What is wrong with that argument?

- ☐ A. The argument is correct — closing deletes filtered rows
- ☐ B. The argument is correct, but only for Copies
- ☐ C. Saving while filtered never touches the stored data
- ☐ D. The funnel icon prevents the sheet from saving

Q30. If Anaya had filtered instead of deleted, then later genuinely wanted to permanently remove the Class 5 books forever, what would she now need to do?

- ☐ A. Nothing further — the filter already deleted them
- ☐ B. Rename the sheet before deleting anything
- ☐ C. Wait a week for Sheets to delete them automatically
- ☐ D. Show the hidden rows again, then select and delete them

Answer Key

Q1: (B) (b) A funnel icon. Option (d) is close but not right: the tick boxes appear later, inside the panel that opens after you click the funnel.

Q2: (C) (c) Data  Create a filter. Insert in (b) is the tempting guess, because Insert is where charts come from — but a filter changes which data you see, so it lives in the Data menu.

Q3: (A) (a) hidden. Deleted in (b) is the mistake this whole topic exists to prevent — the rows look gone, but they are still sitting in the sheet.

Q4: (A) (a) Rows 3 and 4 are still there, just hidden — a skipped number is the sheet's way of proving a row exists but isn't shown. Option (b) describes what deletion would look like, but deletion renumbers the remaining rows with no gaps at all.

Q5: (B) (b) No — filtering never deletes data, it only changes which rows you can see. Option (a) sounds reasonable if you only look at the screen, but the row numbers prove otherwise: they skip instead of renumbering, showing the rows are still there.

Q6: (A) (a) They become visible again — ticking a value in Filter by values always means "show these rows," the exact opposite of unticking. Option (b) is the trap this whole topic warns against: nothing is ever deleted by ticking or unticking, only shown or hidden.

Q7: (C) (c) Every different value found in that column — for the Class column that means 3, 4 and 5, each with its own tick box. Option (d) is wrong because a filter never deletes rows, so there is nothing deleted for the list to show.

Q8: (B) (b) A row still in the sheet but not shown on screen — hidden is not the same as gone. Option (c) describes deletion, which is a completely different and permanent action that a filter never performs.

Q9: (D) (d) Tick the value again, or turn the filter off — either one shows every row exactly as it was, with nothing to retype. Option (a) is unnecessary and risky: the rows were never gone, so guessing them from memory could introduce mistakes.

Q10: (D) (d) They stay exactly the same, just out of view — filtering never edits or moves any values, it only chooses what to display. Option (b) is the exact mistake Anaya almost made by deleting instead of filtering.

Q11: (D) (d) Panchatantra, Space Facts and Ant Diary — the three books with 4 in the Class column. Option (a) is exactly backwards: those are the books that get hidden, because unticking a value hides it rather than showing it.

Q12: (A) (a) The Class 3 and Class 5 books are gone for good, so the librarian's record is destroyed. The others describe things that either do not happen or would not matter — losing real data is the only consequence that cannot be undone later.

Q13: (C) (c) Three: Malgudi Days, Rainbow Rhymes and Cricket Stars. Two in (b) catches anyone who counts the unticked values, 3 and 5, instead of counting the rows those values sit in.

Q14: (A) (a) Malgudi Days and Cricket Stars — the two books with 5 in the Class column. Option (b) lists the Class 4 books, which would be hidden by this filter, not shown.

Q15: (D) (d) Filtering changes only what you see, not what's real — sunglasses change how the world looks to you without changing the world itself. Option (c) is the opposite of the point: the

numbers underneath never change at all.

Q16: (B) (b) 7 — Malgudi Days has 3 copies and Cricket Stars has 4, and $3 + 4 = 7$. Option (a), 13, is actually the Class 4 total, so it belongs to a different filter altogether.

Q17: (B) (b) 4 only — Rainbow Rhymes is the single Class 3 book, and it sits in row 4 of the sheet (row 1 is the header). Option (c), 2, 5 and 7, is the row list for a Class 4 filter instead.

Q18: (B) (b) All six rows are visible again — with every value ticked, nothing is hidden, so the sheet looks exactly like it did before any filter was applied. Option (a) has it backwards: ticking everything shows everything, it does not hide it.

Q19: (C) (c) 2 and 3 — Ant Diary has 2 copies and Malgudi Days has 3, and both are fewer than 4. Option (d) wrongly includes 4 itself, which is not fewer than 4.

Q20: (A) (a) Filtering Copies to show only values above 5 — this uses the funnel on the Copies column, a completely separate column from Class. Options (b), (c) and (d) all involve clicking the funnel above Class itself.

Q21: (A) (a) It's the total of the copies in the three hidden rows — Malgudi Days (3) + Rainbow Rhymes (8) + Cricket Stars (4) = 15, and $13 + 15 = 28$ exactly. Option (c) is the mistake Anaya almost made: nothing was deleted, the hidden copies are just left out of the visible total.

Q22: (B) (b) Re-ticking a hidden value brings that row's exact data straight back, with no numbers changed — if the data had truly been altered, re-ticking could not restore it perfectly. Options (a) and (c) are both true facts about filters, but neither one proves anything about whether the data itself was changed.

Q23: (C) (c) 2, 3, 4 — counting up with no gaps, because deleting a row truly removes it and every row below shifts up to fill the space. Option (a) is exactly what filtering looks like instead — the gaps at 2, 5, 7 are the real clue that nothing was deleted.

Q24: (B) (b) Panchatantra and Ant Diary — hiding Class 3 and 5 leaves the three Class 4 books, then unticking Copies value 5 also hides Space Facts, which has exactly 5 copies. Option (c) forgets that second filter on Copies, which removes Space Facts from view.

Q25: (A) (a) Yes — both actions result in every row being visible again, because nothing was ever deleted in the first place. Option (b) invents a consequence that never happens; turning a filter off simply removes the funnels, it destroys nothing.

Q26: (D) (d) Filter by values only filters the values inside one column at a time — ticking Class values can show or hide by class, but it has no way to also check the Copies numbers in the same click. Option (a) is false; the funnel appears in every header cell, not just one.

Q27: (B) (b) After fewer rows show following a filter action — skipped row numbers are the sheet's proof that the missing rows are hidden, not deleted. Options (a), (c) and (d) are all changes that have nothing to do with which rows are shown or hidden.

Q28: (A) (a) No — she still needs to also check or filter the Copies column, since ticking Class 4 alone still shows Ant Diary, which has only 2 copies. Option (d) is wrong because a Class filter has no effect at all on the Copies column.

Q29: (C) (c) Saving while filtered never touches the stored data — it's still there, only the view is limited, and reopening the sheet with the filter off shows every row again. Option (a) confuses "not currently shown" with "gone," which is the exact confusion this topic warns against.

Q30: (D) (d) Show the hidden rows again, then select and delete them — you cannot delete a row you cannot currently select, and hidden rows stay skipped over until they're shown again. Option (a) repeats the very mix-up this topic teaches against: filtering was never deletion, so there is nothing left already done.

You've got this! Keep learning and shining! - Ruchi Math Coaching