Dot-Grid Handwriting Practice: Letter Placement Guides for Clearer Writing

Original tasks 1, 2 / complete keys

Task 1

On a dot grid with dots every 4 mm, you set the midline two dot rows above the baseline. Write the letters a, c, e, and o. Each letter reaches the midline and sits on the baseline. Measure the gap between a and c as 4 mm and between c and e as 8 mm. Express both gaps in dot intervals and state whether they differ by more than one interval.

Answer: The gaps are 1 interval and 2 intervals. They differ by 1 interval, which is not more than one interval, so the spacing is within the stated tolerance.

Reason: Dot spacing is 4 mm, so 4 mm equals 1 interval and 8 mm equals 2 intervals. The difference is 2 minus 1 equals 1 interval. The check compares the difference to one interval.

Check: Divide each measured gap in millimetres by the dot spacing in millimetres to get intervals, then subtract the smaller interval count from the larger.

Task 2

A ten-letter sample contains six letters that touch the baseline and five letters without ascenders that reach within one dot row of the midline. Under the hypothetical thresholds of eight baseline contacts and seven x-height tops, does the sample pass either check? Explain using the counts.

Answer: It fails both checks: six is below eight, and five is below seven.

Reason: The baseline threshold is eight contacts out of ten, and the sample has six. The x-height threshold is seven tops out of ten, and the sample has five. Both counts are lower than the stated thresholds.

Check: Compare each count directly to its threshold: 6 versus 8 and 5 versus 7. A count meets the threshold only if it is equal to or greater than the threshold.

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Original tasks 3, 4 / complete keys

Task 3

You write the word 'handy' on a dot grid with 5 mm dots. The letters h, a, n, d, and y are present. State where each letter should sit relative to the baseline and midline under the convention, and identify which letters are ascenders and which is a descender.

Answer: h and d are ascenders and rise above the midline; a and n sit on the baseline and reach the midline; y is a descender and falls below the baseline. All letters except y sit on the baseline, and y starts at the baseline and extends below it.

Reason: The convention places letters without descenders on the baseline, letters without ascenders at the midline, ascenders above the midline, and descenders below the baseline. In 'handy', h and d have ascenders, a and n do not, and y has a descender.

Check: For each letter, ask whether it has an ascender or descender, then check its baseline contact and midline reach against the convention.

Task 4

A dot grid has dots every 6 mm. You choose an x-height of one dot row and write a five-letter word with no ascenders or descenders. All five letters touch the baseline and four reach the midline. The four inter-letter gaps are 6 mm, 6 mm, 12 mm, and 6 mm. Using the hypothetical thresholds of eight baseline contacts out of ten and gaps differing by no more than one interval, state the baseline count, the x-height count, the gap intervals, and whether the word passes the spacing check.

Answer: Baseline contacts are 5 out of 5, x-height tops are 4 out of 5, and the gaps are 1, 1, 2, and 1 intervals. The largest gap difference is 1 interval, so the spacing check passes. The baseline count meets the threshold in this small sample, and the x-height count is below the hypothetical seven-out-of-ten threshold, so x-height consistency needs another attempt.

Reason: Divide each gap by 6 mm to get intervals: 6 mm is 1, 12 mm is 2. The largest difference is 2 minus 1 equals 1 interval, which meets the spacing tolerance. The baseline count is 5, and the x-height count is 4; compare these to the stated thresholds.

Check: Convert gaps to intervals by division, find the largest minus smallest interval, and compare counts to thresholds. Record the units as dot intervals and state that 6 mm is a measured example.

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Source rubric / reflection

- [ ] Baseline contact: most letters without descenders sit on the baseline.
- [ ] X-height consistency: letters without ascenders reach near the midline within the chosen tolerance.
- [ ] Ascender and descender extent: ascenders pass the midline and descenders pass the baseline by a consistent amount.
- [ ] Spacing: inter-letter gaps and word gaps are measured in dot intervals and kept within the chosen tolerance.
- [ ] Style flexibility: valid differences in width, slant, and terminal shape are accepted when placement rules are met.
- [ ] Self-check: counts and measurements are recorded with consistent units and stated hypothetical values.

Reflection: What did you check, what did you change, and what will you try next?