

# SHL Numerical Interactive Scratch-Paper Templates

Five reusable templates — print them and use them on your actual test, not just to follow along with the video.

## Inside, for each format:

- Two ready-to-use blank copies — reuse the same structure for every question of that type
- One worked example, filled into the exact same template, from the Forge walkthrough video

## Formats:

1. Table Classification
2. Drag Ranking
3. Pie Chart
4. Line Graph
5. Stacked Bar

# Table Classification

One row, one verdict — check the cheapest disqualifier first.

BLANK TEMPLATES — COPY THIS STRUCTURE FOR ANY CLASSIFICATION QUESTION

Copy 1

| Row | Condition 1 | Condition 2 | Condition 3 | Verdict |
|-----|-------------|-------------|-------------|---------|
|     |             |             |             |         |
|     |             |             |             |         |
|     |             |             |             |         |

Copy 2

| Row | Condition 1 | Condition 2 | Condition 3 | Verdict |
|-----|-------------|-------------|-------------|---------|
|     |             |             |             |         |
|     |             |             |             |         |
|     |             |             |             |         |

WORKED EXAMPLE — Q1, SALES TARGETS

| Row | Condition 1 | Condition 2 | Condition 3 | Verdict |
|-----|-------------|-------------|-------------|---------|
| A   | ✓ all 3 mo. | ✓ 47.5      |             | Met     |
| B   | ✓ all 3 mo. | ✗ 44.8      |             | Not Met |
| C   | ✗ Feb=13.5  | ✓ 46.5      |             | Not Met |
| D   | ✓ all 3 mo. | ✓ pass      |             | Met     |

Rep C's total looks fine — the trap is one failing month cell, not a weak total. Condition headers: Each month ≥ £14k? / Total ≥ £45k?

HOW TO USE THIS TEMPLATE

- Write one column per condition the question gives you — not one column for the final answer.
- Scan for the cheapest disqualifier first: one failing cell anywhere in a row kills the whole row.
- Only fill the Verdict column once every condition cell in that row is checked.
- Tiered version (None/5%/10% etc.): test the top tier's conditions first, fall back if it fails.

# Drag Ranking

Anchor → dependents → remainder. Don't rank what you can see — rank what you derive.

**RANK 1 = ■ Lowest ■ Highest — check this before you drag anything**

**BLANK TEMPLATES — COPY THIS STRUCTURE FOR ANY RANKING QUESTION**

Copy 1

|                                               |
|-----------------------------------------------|
| <b>ANCHOR:</b> ____ = ____                    |
| Name ____ rel: ____ = ____                    |
| Name ____ rel: ____ = ____                    |
| Name ____ rel: ____ = ____                    |
| <b>REMAINDER:</b> ____ = total – known = ____ |

Copy 2

|                                               |
|-----------------------------------------------|
| <b>ANCHOR:</b> ____ = ____                    |
| Name ____ rel: ____ = ____                    |
| Name ____ rel: ____ = ____                    |
| Name ____ rel: ____ = ____                    |
| <b>REMAINDER:</b> ____ = total – known = ____ |

**WORKED EXAMPLE — Q2, BRICKLAYERS (LOWEST → HIGHEST)**

|                                           |
|-------------------------------------------|
| <b>ANCHOR: Ben = 120</b>                  |
| Cara = Ben × 1.6 (60% more) = 192         |
| Diana = Cara ÷ 2 = 96                     |
| Femi = Cara + 40 = 232                    |
| Ethan = (Femi ÷ 4) + 10 = 68              |
| <b>REMAINDER: Ana = 1,040 – 708 = 332</b> |

Final order: Ethan 68 → Diana 96 → Ben 120 → Cara 192 → Femi 232 → Ana 332

## HOW TO USE THIS TEMPLATE

- Find the one person with a real number — that's your anchor, write it first.
- Work down the chain only in the order each name actually depends on.
- The 'rest of the team' name is always last — total minus everything else.
- Only sort into final rank once every value is filled in — never sort by eye.

# Pie Chart

Anchor or ratio — either way, the last share is always free.

BLANK TEMPLATES — COPY THIS STRUCTURE FOR ANY PIE-SHARE QUESTION

Copy 1

|                                                                       |                    |                    |                    |
|-----------------------------------------------------------------------|--------------------|--------------------|--------------------|
| <b>A</b><br>= ____                                                    | <b>B</b><br>= ____ | <b>C</b><br>= ____ | <b>D</b><br>= ____ |
| No anchor? $x = \_\_ \rightarrow \_\_x + \_\_x + \_\_x + \_\_x = 100$ |                    |                    |                    |

Copy 2

|                                                                       |                    |                    |                    |
|-----------------------------------------------------------------------|--------------------|--------------------|--------------------|
| <b>A</b><br>= ____                                                    | <b>B</b><br>= ____ | <b>C</b><br>= ____ | <b>D</b><br>= ____ |
| No anchor? $x = \_\_ \rightarrow \_\_x + \_\_x + \_\_x + \_\_x = 100$ |                    |                    |                    |

WORKED EXAMPLE — Q3, BUDGET ALLOCATION (ANCHOR GIVEN: B = 14)

|                                                                     |                         |                         |                       |
|---------------------------------------------------------------------|-------------------------|-------------------------|-----------------------|
| <b>A</b><br>21 (=1.5×14)                                            | <b>B</b><br>14 (anchor) | <b>C</b><br>25 (=14+11) | <b>D</b><br>40 (free) |
| $D = 100 - 21 - 14 - 25 = 40$ (solved last, never derived directly) |                         |                         |                       |

WORKED EXAMPLE — Q8, DEPARTMENT BUDGET (NO ANCHOR, RATIOS ONLY)

|                                                                   |                             |                               |                          |
|-------------------------------------------------------------------|-----------------------------|-------------------------------|--------------------------|
| <b>Personnel</b><br>40 (=4x)                                      | <b>Equipment</b><br>10 (=x) | <b>Facilities</b><br>30 (=3x) | <b>Misc</b><br>20 (free) |
| $4x + x + 3x + 2x = 100 \rightarrow 10x = 100 \rightarrow x = 10$ |                             |                               |                          |

HOW TO USE THIS TEMPLATE

- Plug in the anchor (if given) and work outward one relationship at a time.
- No anchor? Name the unknown 'x', write everything as a multiple of x, sum to 100, solve for x.
- Always solve the 4th share last by subtracting the other three from 100 — never derive it directly.
- Scoring is exact, not within a range — don't round a slider to 'close enough'.

# Line Graph

Write the formula once, in words — then apply it to every point.

BLANK TEMPLATES — COPY THIS STRUCTURE FOR ANY LINE-GRAPH QUESTION

Copy 1

|             |       |
|-------------|-------|
| Rule: _____ |       |
| Pt 1        | _____ |
| Pt 2        | _____ |
| Pt 3        | _____ |
| Pt 4        | _____ |

Copy 2

|             |       |
|-------------|-------|
| Rule: _____ |       |
| Pt 1        | _____ |
| Pt 2        | _____ |
| Pt 3        | _____ |
| Pt 4        | _____ |

WORKED EXAMPLE — Q5, CUSTOMER VISITS (SEQUENTIAL RULE)

|                                                                    |                     |
|--------------------------------------------------------------------|---------------------|
| Rule: start 42, +4/month; if value strictly exceeds 50, subtract 7 |                     |
| M1                                                                 | 42                  |
| M2                                                                 | 46                  |
| M3                                                                 | 50 (not >50, stays) |
| M4                                                                 | 54 → 47 (−7)        |
| M5                                                                 | 51 → 44 (−7)        |

WORKED EXAMPLE — Q7, EXCHANGE RATES (DERIVE-FROM-DATA)

|                                             |                |
|---------------------------------------------|----------------|
| Rule: rate = foreign ÷ USD (output ÷ input) |                |
| GBP                                         | 36÷45 = 0.80   |
| EUR                                         | 243÷270 = 0.90 |
| CAD                                         | 100÷80 = 1.25  |
| AUD                                         | 66÷60 = 1.10   |

HOW TO USE THIS TEMPLATE

- Write the rule or formula in the top box first, in words, before touching a single number.
- Sequential rule: watch the exact comparison word — 'exceeds' vs 'at least' change the answer.
- Derive-from-data: apply the same formula to every point, then sanity-check (do the signs/sides make sense?).
- If a result looks impossible, you've mistranslated the sentence — go back, don't push forward.

# Stacked Bar

Tag every percentage to its base before you compute anything.

## BLANK TEMPLATES — COPY THIS STRUCTURE FOR ANY STACKED-BAR QUESTION

Copy 1

|                                            |                        |
|--------------------------------------------|------------------------|
| TOTAL: ____ BASE: ____                     |                        |
| Part A<br>____ (____%)                     | Part B<br>____ (____%) |
| part ÷ %(decimal) = whole — never part × % |                        |

Copy 2

|                                            |                        |
|--------------------------------------------|------------------------|
| TOTAL: ____ BASE: ____                     |                        |
| Part A<br>____ (____%)                     | Part B<br>____ (____%) |
| part ÷ %(decimal) = whole — never part × % |                        |

## WORKED EXAMPLE — Q9, BONUS DISTRIBUTION (REVERSE-ENGINEERED)

|                                                                |                          |
|----------------------------------------------------------------|--------------------------|
| TOTAL: 275 (=220÷0.8) BASE: Sales total = 275                  |                          |
| Partial<br>55 (20%)                                            | Full<br>220 (80%, given) |
| 220 = 80% of total → total = 220 ÷ 0.8 = 275 (never 220 × 0.8) |                          |

## WORKED EXAMPLE — Q6, INSURANCE COSTS (% APPLIES TO PART OF THE BAR)

|                                                                                     |                            |
|-------------------------------------------------------------------------------------|----------------------------|
| TOTAL Yr1: 2,400 TOTAL Yr2: 3,000 (total ×1.25)                                     |                            |
| Deductible Yr1<br>600 (25%)                                                         | Premium Yr1<br>1,800 (75%) |
| Yr2 premium = 1,800×1.4 = 2,520 → deductible = 3,000–2,520 = 480 (16% of NEW total) |                            |

### HOW TO USE THIS TEMPLATE

- Before any maths: write down what the percentage is actually a share OF — that's the base.
- An increase, a share-of-total, and a ratio are three different operations — don't mix them up.
- Working backwards from a part to a whole? Divide by the decimal, never multiply.
- A ratio like 1:3 means 4 total parts (1+3) — the first share is 1-in-4, not 1-in-3.