

The night before the ESAT

Pack the boring things, wake the formulas once, then stop.

THE SHORT ANSWER

Check your original photo ID against the current policy, save your Pearson confirmation, plan to arrive 30 minutes early, and put everything else in tomorrow's bag. Read the recall sheet once from memory. Do not take a new mock, learn a new chapter or trade sleep for one more score prediction.

Checked against the sources named in this guide, August 2026. British English. Free to share.

1 Tonight's 45-minute landing sequence

1. **Ten minutes: identity and booking.** Your booking name must match your original, unexpired, government-issued photo ID. Re-open the current policy if any detail is uncertain. Save the Pearson confirmation offline or print it.
2. **Ten minutes: route and timing.** Confirm the test centre, travel time and an arrival target 30 minutes before the appointment. Add a delay buffer you will not resent.
3. **Fifteen minutes: recall, closed book.** Use the next page. Say the meaning and units before uncovering each relation. Star at most three fragile items.
4. **Ten minutes: shut down.** Set alarms, lay out clothes, charge the phone that stays in the locker, and stop studying.

Your own calculator, paper, pen, watch, notes, food and drink normally stay outside the testing room. The centre provides an erasable notebook and pen. Approved access arrangements and comfort aids must already be on the booking; tonight is too late to improvise them.

1 The tell

If a task can change tomorrow's logistics or refresh a fact you already know, do it. If it creates a new score, a new fear or a new syllabus branch, do not. The night before is for reducing friction, not measuring ability.

One-page formula recall

Use Mathematics 1 plus only your required modules. This is a recall trigger, not a replacement for the official specification.

MATHEMATICS 1

$$x = \frac{-b \pm \sqrt{b^2 - 4ac}}{2a}; b^2 - 4ac \text{ controls roots.}$$

$m = \Delta y / \Delta x$; area under a rate-time graph gives accumulated quantity.

Scale factor k : length k , area k^2 , volume k^3 . Percentage change uses multiplier $1 \pm r/100$.

$\sin \theta = \text{opp/hyp}$, $\cos \theta = \text{adj/hyp}$, $\tan \theta = \text{opp/adj}$; exact $0^\circ, 30^\circ, 45^\circ, 60^\circ, 90^\circ$.

Probability: multiply along a branch, add disjoint branches; without replacement changes the next denominator.

Bounds: build the interval before choosing upper or lower endpoints. Units: square and cube the conversion for area and volume.

PHYSICS

$I = Q/t$, $R = V/I$, $P = IV = I^2R$, $E = VIt$; $V_s/V_p = n_s/n_p$ and ideal $V_p I_p = V_s I_s$.

$v^2 - u^2 = 2as$; $F = ma$; $p = mv$; $F = \Delta p / \Delta t$; $E_k = \frac{1}{2}mv^2$; $E_p = mgh$.

$W = Fd$, $P = E/t$; $F = kx$ and spring energy $= \frac{1}{2}kx^2$; efficiency $= 100 \times \text{useful/input}$.

$E = mc\Delta T$, $E = mL$, $\rho = m/V$, $p = F/A$, $p = h\rho g$, and at fixed temperature $PV = \text{constant}$.

$v = f\lambda$, $f = 1/T$; $F = BIL$ at right angles; half-life means repeated halving, not subtracting a fixed amount.

MATHEMATICS 2

$$S_n = \frac{n}{2}[2a + (n-1)d]; a + ar + \dots + ar^{n-1} = \frac{a(1-r^n)}{1-r}.$$

$$S_\infty = \frac{a}{1-r} \text{ only when } |r| < 1; \text{ binomial coefficient } \binom{n}{r}.$$

Circle $(x-a)^2 + (y-b)^2 = R^2$; $s = R\theta$ and sector area $= \frac{1}{2}R^2\theta$ in radians.

$$\frac{a}{\sin A} = \frac{b}{\sin B}; c^2 = a^2 + b^2 - 2ab \cos C; \text{ area} = \frac{1}{2}ab \sin C.$$

$\log(xy) = \log x + \log y$; $\log(x/y) = \log x - \log y$;

$\log(x^k) = k \log x$.

$$\frac{d}{dx}x^n = nx^{n-1}; \int x^n dx = x^{n+1}/(n+1) + C, n \neq -1;$$

definite integral $= F(b) - F(a)$.

CHEMISTRY AND BIOLOGY

Chemistry: $n = m/M_r$; at rtp $V = 24n \text{ dm}^3$; $c = n/V$ with V in dm^3 .

Yield $= 100 \times \text{actual/predicted}$; $q = mc\Delta T$; $\Delta H \approx \sum E_{\text{broken}} - \sum E_{\text{formed}}$.

R_f = distance moved by substance / distance moved by solvent front; one pH unit means a factor of 10 in $[\text{H}^+]$.

Biology: rate = change / time; surface-area:volume must use matching powers and units; transpiration rate = water volume / time.

Genetics: state alleles, gametes and offspring probabilities; independent events multiply, alternative outcomes add.

Recall check: for every formula you keep, say what each symbol means, the required unit and one condition. If you cannot, star it. Three stars are useful; twenty are a new revision plan.

2 Worked example: choose the chain, not one formula

Worked example An ideal transformer feeding a resistor

An ideal transformer has 2400 turns on a 240 V primary coil and 120 turns on its secondary coil. The secondary is connected across a $12\ \Omega$ resistor. Find the primary current.

Use the turns ratio first:

$$\frac{V_s}{240} = \frac{120}{2400} = \frac{1}{20} \Rightarrow V_s = 12\text{ V}.$$

Then the secondary current is

$$I_s = \frac{V_s}{R} = \frac{12}{12} = 1\text{ A}.$$

For an ideal transformer, input and output powers match:

$$240I_p = 12 \times 1 \Rightarrow I_p = 0.05\text{ A}.$$

Correct: The secondary has fewer turns, so it must be the lower-voltage, higher-current side. That qualitative check catches an inverted ratio.

Trap: Using 2400/120 in the wrong direction gives 4800 V. It is arithmetically tidy and physically backwards.

Do not spend tonight memorising a worked solution. Memorise the three-question check: *what stays equal, which side should be larger, and do the units close?*

3 What not to cram

- **A full new topic.** Recognition without retrieval practice is a confidence costume.
- **A fresh mock.** It can only create marking work and emotional noise after the useful repair window has closed.
- **Predicted score conversions.** UAT-UK does not publish a fixed raw-mark table, and each module is scaled separately.
- **Every formula in every module.** You only sit the modules your course requires. Biology needs relationships and processes more than a wall of equations.
- **Forum memories of live questions.** They may be incomplete, off-spec or prohibited to share. Use the official specification.

2 Try it

Take one blank sheet. From memory, write your three starred relations and one unit or condition beside each. If they are correct, put the sheet away. If one is wrong, repair that one and repeat once. Then stop.

4 Tomorrow morning and in the room

Eat and drink normally before check-in. Arrive 30 minutes early. If you are more than 15 minutes late, UAT-UK says you may be refused entry. Test the erasable pen before the timer starts and ask for a replacement immediately if it is poor.

Each module is separately timed for 40 minutes, usually with no break. Use checkpoints at 13, 26 and 38 minutes. Before a module ends, answer every blank because wrong answers carry no penalty. If a technical or procedural problem occurs, raise your hand during the test so the centre can record it; report serious incidents through the official route after leaving.

The final useful sentence tonight is not motivational theatre: **tomorrow's job is to make the next good decision, 27 times per module.**

5 Sources

UAT-UK, Test Day and ESAT Content Specification

Current arrival, ID, room and incident rules: [Test Day](#). Recall-sheet relationships and conditions: [official ESAT hub](#).

Check the live UAT-UK and Pearson rules: they override this August 2026 checklist.