From forecast to practice

A three-week retester sequence for every New York State Regents exam scheduled in 2027.

Choose a department

Algebra I	Guide 4–5 / Student 2–4
Geometry	Guide 6–7 / Student 5–7
Algebra II	Guide 8–9 / Student 8–10
English Language Arts	Guide 10–11 / Student 11–13
Global History and Geography II	Guide 12–13 / Student 14–16
U.S. History and Government	Guide 14–15 / Student 17–19
Life Science: Biology	Guide 16–17 / Student 20–22
Earth and Space Sciences	Guide 18–19 / Student 23–25
Physical Science: Chemistry	Guide 20–21 / Student 26–28
Physical Science: Physics	Guide 22–23 / Student 29–31
Physical Setting/Chemistry	Guide 24–25 / Student 32–34
Physical Setting/Physics	Guide 26–27 / Student 35–37

Run two 25-minute sessions each week

Week 1 surfaces the reasoning students already use. Week 2 changes the representation or source and introduces a different tested demand. Week 3 asks students to work independently and justify a decision. Use the suggested link for a fresh released task each week.

Before class, print one course’s three student sheets. Every prompt includes the information students need and an entry point for a missed session. Short response tasks build parts of longer essays and clusters. Reserve a separate period for full-form timing.

Which exams run when?

NYSED’s final 2027 schedules. Local reporting times are set by the school.

Exam	January	June	August
Algebra I	Wed Jan 27 PM	Jun 16 PM	Aug 17 AM
Geometry	Thu Jan 28 PM	Jun 22 PM	Aug 18 PM
Algebra II	Fri Jan 29 AM	Jun 17 PM	Aug 17 PM
English Language Arts	Tue Jan 26 AM	Jun 15 AM	Aug 17 AM
Global History and Geography II	Thu Jan 28 AM	Jun 16 AM	Aug 17 PM
U.S. History and Government	Wed Jan 27 AM	Jun 22 AM	Aug 18 AM
Life Science: Biology	Fri Jan 29 AM	Jun 17 AM	Aug 18 PM
Earth and Space Sciences	Tue Jan 26 PM	Jun 15 PM	Aug 18 AM
Physical Science: Chemistry	Tue Jan 26 PM	Jun 23 AM	Aug 18 AM
Physical Science: Physics	Wed Jan 27 PM	Jun 24 AM	Unscheduled
Physical Setting/Chemistry	Tue Jan 26 PM	Jun 23 AM	Unscheduled
Physical Setting/Physics	Wed Jan 27 PM	Jun 24 AM	Unscheduled

January schedule **June schedule** **August schedule**

For Chemistry and Physics, confirm the exam title on the roster before selecting a packet. January legacy Physics is restricted. Its practice anchors come from public June releases. June 2027 is the final scheduled legacy Chemistry and Physics administration. Checkpoint A/B are locally developed world language exams.

NYSED transition schedule **NYSED world languages**

Evidence shared by all twelve departments

74 comparable public forms and 3,738 item or scoring-slot records underlie the original forecast. The 665-feature evidence table reports months separately. Five exam titles have no comparable public January form. For those courses, base practice on the blueprint and the released task structure.

When does the month help?

New retrospective comparison across January, June and August. Lower Brier scores are better.

Target	Held out	Subjects	All months	Same month	Pooled wins
January	8	4	0.1135	0.1581	7
June	15	7	0.1279	0.1624	14
August	15	7	0.1056	0.1483	15

Each held-out form was predicted using earlier same-design forms only. Both models predicted the presence of multiple-choice codes previously seen by that point. Each required prior evidence from the target month and another month. Form means receive equal weight. The 38 folds span seven subjects; courses with only new or June-only evidence could not enter this comparison.

Brier score averages squared differences between predicted probability and actual presence (0 or 1). The all-month model smooths k hits in n forms as (k+1)/(n+2). Predictions are neither exact-question odds nor student pass probabilities. Historical forms share a blueprint and some training data, so fold results are dependent.

A 25-minute Burgard session

0–3 min Use the re-entry cue individually. Students who missed the prior lesson can start here.

3–8 min Model one analogous reasoning step. Cover the worked response. Ask partners to predict the next move and give a reason.

8–18 min Students complete the original task. Sample one representation or source choice and one inference. Ask what supports it.

18–23 min Compare two anonymous approaches. Use the specific feedback move, then have students revise one sentence, equation or annotation.

23–25 min Collect a fresh explanation. Sort anonymously into independent, after a cue, and insufficient evidence. Keep absence separate from attempts.

At the PLC, choose the next task from the observed difficulty. Accurate reasoning in a familiar example warrants a new representation. Incomplete evidence warrants a short follow-up before changing the sequence.

Algebra I

Released form evidence

Every current Q35 asked for a two-variable system. Seven used equations and one used inequalities. Three required a graph. Four asked students to check someone's proposed prices and solve algebraically. In January 2025 students graphed and interpreted an intersection. In January 2026 they checked a claim and solved.

Only two comparable January forms. A systems-only review leaves 76 of 82 possible credits outside that single six-credit task. Rotate function interpretation, equations, statistics and number skills through the same week.

Eligible public forms • January 2 / June 3 / August 3

Worked responses and follow-up questions

1 Two receipts

3c + 2t = 12 and 2c + 4t = 16. The claim gives $12.50 on receipt one. Double the first equation, subtract the second, and get 4c = 8. Coffee is $2 and tea $3. Both receipts check.

If a total replaces a coefficient, have the student label each term in dollars.

2 Read a function across representations

The rate is (20 − 14)/4 = $1.50 per cup. C = 14 + 1.5n. Equating costs gives n = 28. The point (28,56) means both charge $56 for 28 cups.

If the student chooses 14 as the rate, ask what changes between two rows.

3 Make the boundary count

4n + 2p ≤ 48 and n + p ≥ 15, for whole n,p ≥ 0. (8,7) costs $46 for 15 items. (10,5) costs $50 for 15 items and exceeds budget.

If both pass, ask the student to show a cost and item count for each pair.

Average mapped multiple-choice slots per released form

Feature	January	June	August
Function notation and evaluation	2.50	3.67	2.33
Solve one-variable equations and inequalities	2.00	2.33	2.00
Build equations and constraints	1.50	1.33	1.33

A dash marks an unavailable month. Rows can overlap. See seasonal_evidence.csv for counts, uncertainty and the full feature set.

Official design or administration guidance

Algebra I

4 Summarize a distribution

First mean 5 and median 4. New mean 48/6 = 8 and median 4.5. Median better reflects the cluster because the long delivery pulls the mean up.

If the new median is 4, have the student locate positions 3 and 4.

5 Find what a zero means

h = t(6 − t). Launch and landing are at 0 and 6 seconds. Symmetry gives t = 3 and h(3) = 9 meters. The zeros mean ground level.

If the student reports 3 meters, ask for both coordinates of the vertex and their units.

6 Choose and check a model

At 40 flyers costs are $34 and $30. Equality gives 12 = 0.20n, so 60 flyers and $42. The first is cheaper above 60 because its per-flyer price is lower.

If equality is the entire answer, ask for one example on each side of 60.

Released practice for each week

Week 1 2026-01 • Q35 • Check and solve a system
Question booklet **Official mapping / guide**

Week 2 2025-01 • Q35 • Graph and interpret a system
Question booklet **Official mapping / guide**

Week 3 2026-08 • Q35 • Model another system
Question booklet **Official mapping / guide**

Geometry

Released form evidence

All five current final problems required proof. The first two used a geometric diagram. The three 2026 forms used coordinates. January required proving a trapezoid, then establishing parallelism and checking a length relationship.

One comparable January. Coordinate proof deserves rehearsal, along with a diagram-only route. The five problems cannot fix the theorem, figure or location of a future proof.

Eligible public forms • January 1 / June 2 / August 2

Worked responses and follow-up questions

1 A diagonal that proves something

AC = CA. Angles BAC and DCA are congruent by alternate interior angles. SAS proves triangle BAC congruent to DCA. Corresponding angles BCA and DAC are congruent, so BC is parallel to AD by the converse alternate interior angle theorem.

If parallel lines are claimed from appearance, request the pair of congruent angles that warrants the claim.

2 From coordinates to a proof

AB and CD are horizontal. Slopes of BC and AD both equal 3/2. Both pairs of opposite sides are parallel. Adjacent sides AB and BC are not perpendicular, so the parallelogram is not a rectangle.

If equal slopes are reported without a conclusion, ask what two pairs of parallel sides establish.

3 Why the shadows tell us height

Equal sun angles and right angles give AA similarity. h/8 = 1.5/2, so h = 6 m. A sloping surface or observations at very different times can change the angle relationships.

If the student adds 6 m, have them compare corresponding side ratios.

Average mapped multiple-choice slots per released form

Feature	January	June	August
Prove geometric theorems	4.00	4.50	4.00
Right-triangle trigonometry	2.00	3.00	2.50
Transformations in the plane	2.00	2.00	2.00

A dash marks an unavailable month. Rows can overlap. See seasonal_evidence.csv for counts, uncertainty and the full feature set.

Official design or administration guidance

Geometry

4 Turn an arc into a length

150/360 = 5/12. Length = (5/12)(24π) = 10π m, below the semicircle length 12π. The chord is shorter than the curved arc; it connects the endpoints directly.

If area is used, ask whether the requested quantity covers a surface or follows a path.

5 Which measures scale?

Original 20π cm³. New radius 6 and height 15 give 540π cm³. Volume increases by 27 because all three linear dimensions scale by 3.

If the answer is 60π, expand the square of the new radius before multiplying by height.

6 Prove or disprove a classification

Successive slopes are 1/3, −3, 1/3, −3. All squared side lengths are 10. Four equal sides and a right angle establish a square. Equal diagonals alone could also describe a nonsquare rectangle.

If “looks square” appears, require one calculation for perpendicularity and one for length.

Released practice for each week

Week 1 2026-01 • Q35 • Coordinate proof
Question booklet **Official mapping / guide**

Week 2 2025-06 • Q35 • Diagram-based proof
Question booklet **Official mapping / guide**

Week 3 2026-08 • Q35 • New coordinate proof
Question booklet **Official mapping / guide**

Algebra II

Released form evidence

June and August 2026 had exactly the same broad distribution of credits. Each final task used an applied function, asked for average rate of change with interpretation and included a threshold. The models differed: lung capacity was periodic; tea temperature decayed exponentially.

January 2027 is the first January under this design. Two repeated response demands warrant practice; they provide little information about the next specific function family.

Eligible public forms • January 0 / June 1 / August 1

Worked responses and follow-up questions

1 Explain an interval rate

T(0)=80 and T(20)=35. The average rate is −45/20 = −2.25 °C/min. The exponential term shrinks by a constant factor, so instantaneous cooling is not constant.

If the numerator is 45, ask which temperature is the later value.

2 Read a periodic pattern

Midline 10, amplitude 8, period 12. One model is h = 10 − 8 cos(πt/6) with radian argument. At 15 s the height is 10 m, repeating the 3 s value.

If amplitude is 16, draw the change from the midline to one extreme.

3 Solve an exponential threshold

100(0.9)^t < 50. The real crossing is ln(0.5)/ln(0.9) ≈ 6.58. Hour 6 gives 53.14 and hour 7 gives 47.83, so the first whole hour is 7.

If the inequality reverses incorrectly, test values 6 and 7 directly.

Average mapped multiple-choice slots per released form

Feature	January	June	August
Transform or combine familiar functions	—	4.00	1.00
Rational exponents	—	2.00	1.00
Connect zeros and factors	—	1.00	1.00

A dash marks an unavailable month. Rows can overlap. See seasonal_evidence.csv for counts, uncertainty and the full feature set.

Official design or administration guidance

Algebra II

4 Keep the domain after canceling

For $x \neq 3$, $f(x) = x + 3$. Original denominator is zero at $x = 3$. Domain excludes 3; the graph has a hole at (3,6).

If 6 is given as f(3), substitute 3 in the original denominator.

5 What a simulation supports

4/200 = 0.02. Such an outcome was unusual under the fair model, evidence against fairness in the heads-heavy direction. One small observed run and finite simulation leave uncertainty.

If 16/20 is called the tail probability, distinguish the observed proportion from the proportion of simulations as extreme.

6 Transfer the rate to a new family

Depth rises from 5 to 7, averaging 2/3 m per hour. $\sin(\pi t/6)=1/2$ first at $t=1$. Depth returns to 5 at $t=6$, so zero average rate conceals a rise and fall.

If first time is 5 h, locate the earlier angle with the same sine.

Released practice for each week

Week 1 2026-06 • Q36 • Periodic function in context

Question booklet **Official mapping / guide**

Week 2 2026-06 • Q33 • Interpret a survey

Question booklet **Official mapping / guide**

Week 3 2026-08 • Q36 • Exponential model in context

Question booklet **Official mapping / guide**

English Language Arts

Released form evidence

The two current reading maps assign six questions each to R.4. R.3 accounts for six in June and seven in August; R.2 for five and four. The two argument issues were horse racing and invasive species. Both require a claim, engagement with another position and evidence from at least three sources.

January 2026 used the prior standards. Its debate about employer screening of social media offers a historical task comparison. Its reading codes and content are outside the current probability model.

Eligible public forms • January 0 / June 1 / August 1

Worked responses and follow-up questions

1 When a word changes sides

“Had teeth” gives silence a threatening quality. Switching the radio off and listening for a key suggest anxious anticipation. Fear of a particular person would require additional evidence.

If the response only says “scared,” ask which two actions or words produced that inference.

2 Find the turn

The directions suggest faith in inherited knowledge. The missing bridge makes it insufficient, and asking someone nearby opens another way of learning. The shift complicates reliance without dismissing the father.

If the answer retells events, ask what changes in the narrator's understanding.

3 Write a counterclaim that matters

A defensible position is a limited pilot: A shows demand, C shows use, and B gives a concrete cost. A counterclaim about cost can be met by testing the busiest evenings. The survey's selection method or visits by repeat users limits inference.

If sources are merely listed, ask what each fact does for the claim or objection.

Average mapped multiple-choice slots per released form

Feature	January	June	August
Word choice, meaning and tone	—	6.00	6.00
Development and interaction of ideas, people or events	—	6.00	7.00
Central ideas and themes	—	5.00	4.00

A dash marks an unavailable month. Rows can overlap. See seasonal_evidence.csv for counts, uncertainty and the full feature set.

Official design or administration guidance

English Language Arts

4 Analyze a craft choice

The pale rectangle and the final gesture turn absence into a visible image. Concrete imagery makes the continued presence of a lost neighborhood place perceptible. An alternative interpretation needs support from both details.

If the response only identifies imagery, ask how it changes the reader's understanding of loss.

5 Evaluate the reach of a claim

The claim assumes opening-day demand will persist. Free rides and concentrated recruitment weaken that inference. A justified claim is that initial interest warrants tracking paid ridership over several ordinary weeks.

If students call the numbers false, distinguish accurate data from an unsupported generalization.

6 Build an argument across four voices

One defensible recommendation is a longer two-night-per-week pilot. A and C show a need and observed uptake; B weighs against a permanent daily commitment. D gives context but modest reach. Count unique riders and nights with typical attendance.

If all sources are treated as interchangeable, ask which measures demand, which observes use, and which estimates cost.

Released practice for each week

Week 1 2026-06 • Part 3 • Text analysis and craft
Question booklet **Official mapping / guide**

Week 2 2026-06 • Part 2 • Develop a source-based argument
Question booklet **Official mapping / guide**

Week 3 2026-08 • Part 2 • Transfer to a new argument issue
Question booklet **Official mapping / guide**

Global History and Geography II

Released form evidence

Cartoons appeared on 4/4 January, 5/5 June and 5/5 August forms. Mean cartoon sets per form were 3.75, 1.80 and 2.00. The four January counts were 1, 3, 6 and 5. Decolonization and nationalism (10.7) averaged 4.00, 2.25 and 3.00 MC slots on the smaller topic-mapped sample.

All 14 booklets support stimulus counts. Only 11 have a topic map in the Atlas. A set can serve several questions. The cartoon count increase is exploratory and varies strongly by year.

Eligible public forms • January 4 / June 5 / August 5

Worked responses and follow-up questions

1 Read the object in the cartoon

The key and gate depict imperial control over access to trade. The excluded trader bears the consequences. The creator's audience, location or date would help establish whose perspective the image expresses.

If the student simply lists objects, ask who controls an action and who cannot act.

2 Turn a timeline into context

Salt was widely used. Challenging control of it made colonial power visible in an ordinary purchase. A participation register or local accounts from multiple regions would help assess reach. The summary alone cannot establish universal support.

If a response only repeats the march date, ask why this product was strategically useful.

3 Compare voices on industrialization

Both describe factory time discipline. The owner emphasizes production and cost while the worker stresses control of daily life. A informs us about managerial justification; B about a worker's perceived experience. Neither establishes typical conditions by itself.

If students label one voice reliable and one unreliable, ask “reliable for answering which question?”

Average printed stimulus sets per released form

Feature	January	June	August
cartoon	3.75	1.80	2.00
map	1.25	1.40	0.60
printed text	9.75	9.20	9.20

A dash marks an unavailable month. Rows can overlap. See seasonal_evidence.csv for counts, uncertainty and the full feature set.

Official design or administration guidance

Global History and Geography II

4 Read a map claim critically

The network could favor exporting minerals over trade between districts. Terrain or existing settlements could also explain the route. Freight records by cargo and destination, or topographic maps, would help test the inference.

If the rails alone “prove” motive, ask for an observation that could fit two motives.

5 Explain continuity across independence

Independence transfers political authority. Reliance on a buyer or commodity can constrain revenue and policy. Use export shares or budgets over time to test the claim. The scenario alone establishes no such pattern for either country.

If the student applies the invented figures as fact, return to the source labels.

6 Build an enduring-issue paragraph

Unequal power is defensible. Control over trade or salt shaped people's options, while protest shows agency. An outside example such as resistance to apartheid in South Africa extends the analysis across place and time. This short paragraph rehearses part of the full essay.

If the writing names a theme without consequences, ask who could make a decision and whose choices narrowed.

Released practice for each week

Week 1 2026-01 • Q4 • Cartoon set, Q4–5

Question booklet **Official mapping / guide**

Week 2 2026-06 • Q22 • Timeline set, Q22–23

Question booklet **Official mapping / guide**

Week 3 2026-08 • Q1 • Passage set, Q1–1

Question booklet **Official mapping / guide**

U.S. History and Government

Released form evidence

The January civic issues were Black voting rights (2024), Treaty of Versailles ratification (2025) and Prohibition (2026). January Part I included a photo on 3/3 forms, June on 3/4, August on 1/4. Constitutional foundations appeared across all months.

Three Januaries span different historical periods and kinds of civic conflict. A rotation rule would mistake 11 distinct essay labels for a predictable sequence.

Eligible public forms • January 3 / June 4 / August 4

Worked responses and follow-up questions

1 What did the law respond to?

Rail expansion and dependence on freight created pressure over rates. Complaints like the one illustrated could motivate regulation. The statute establishes federal action; this invented petition illustrates a grievance and cannot document actual lobbying.

If causation rests on the invented petition, ask which evidence could establish historical influence.

2 Read a photograph as evidence

The scene shows organized public advocacy. It cannot establish the percentage of Americans who supported suffrage. Editorial selection affects which participants or moments reached readers. Other photographs and polling or local records could broaden the account.

If the crowd is treated as representative, ask who could be outside the frame.

3 Compare two responses to voting barriers

Both address racial exclusion. The later law strengthened enforcement where formal protection had failed. Registration barriers and the civil rights movement provide relevant context. A response should connect mechanisms to the obstacle being addressed.

If “everyone voted after 1870” appears, ask why enforcement later became a civic issue.

Average printed stimulus sets per released form

Feature	January	June	August
photo	1.33	1.75	0.25
cartoon	2.33	2.75	1.75
printed text	10.33	9.00	10.00

A dash marks an unavailable month. Rows can overlap. See seasonal_evidence.csv for counts, uncertainty and the full feature set.

Official design or administration guidance

U.S. History and Government

4 Source purpose and reliability

The leaflet shows how a campaign might frame the issue through family welfare. A promise does not establish social outcomes. Compare records before and after, considering other causes. An actual period leaflet would be required to document a specific campaign.

If a source's bias is used to dismiss it, ask what question its purpose makes it useful for answering.

5 Follow a civic issue through time

Voting exclusion motivated organizing. Petitions or marches helped press for constitutional change. The amendment removed a sex-based legal barrier, but racial discrimination and registration barriers continued. The Seneca Falls Convention is one relevant outside detail if explained.

If “full equality” is the outcome, ask which legal change occurred and which barriers could remain.

6 Write a document-based civic judgment

The ICC created sustained federal oversight. Later expansion suggests the original powers had limits. The Hepburn Act of 1906 strengthened authority to set maximum rates. Before-and-after rate data could help assess benefits to shippers. Accept another defensible judgment with evidence.

If enactment is equated with success, ask what observable result would show fairer treatment.

Released practice for each week

Week 1 2026-01 • Q37 • Civic literacy: Prohibition
Question booklet **Official mapping / guide**

Week 2 2026-06 • Q37 • Civic literacy: stronger national government
Question booklet **Official mapping / guide**

Week 3 2026-08 • Q37 • Civic literacy: Chinese immigration
Question booklet **Official mapping / guide**

Life Science: Biology

Released form evidence

January 2026 moved through twins, an invasive aquatic plant, pest management and honeybees. Seven of ten clusters contained the word model or models. June averaged seven model-cued clusters; August averaged 7.5. Graph cues varied more across these small groups.

One January and five total forms. Two June 2026 items received universal credit and are excluded from topic occurrence counts. They remain visible as printed records. Cluster word cues include directions and questions.

Eligible public forms • January 1 / June 2 / August 2

Worked responses and follow-up questions

1 Which way did carbon move?

Net uptake is consistent with photosynthesis exceeding respiration. CO_2 fell 80 ppm in the plant chamber while the comparison stayed constant. Some carbon could enter sugars and then plant tissue. The data measure net exchange.

If the student says respiration stopped, ask whether both processes could occur during a net decrease.

2 A model with a missing arrow

Decomposers obtain matter and energy from dead organisms. Respiration releases CO_2, which plants can incorporate. Energy enters as light and leaves as heat. Carbon atoms can cycle among organisms, air and soil.

If energy is drawn from decomposers back to the Sun, ask what leaves as thermal energy.

3 Trace an inherited difference

AA, Aa, Aa, aa. Probability of aa is 1/4 per seed. Four independent offspring can yield other counts. The probability describes many events and does not set a four-seed quota.

If two symbols are assigned from one parent, trace one allele from each.

Average clusters with an explicit word cue per released form

Feature	January	June	August
model	7.00	7.00	7.50
graph	6.00	5.50	2.00
diagram	3.00	4.50	2.50

A dash marks an unavailable month. Rows can overlap. See seasonal_evidence.csv for counts, uncertainty and the full feature set.

Official design or administration guidance

Life Science: Biology

4 Explain selection with a counterexample

If dark insects are less visible on dark bark, they may leave more surviving offspring, increasing the trait frequency. Compare predation or reproductive success by color in both settings. Frequency data alone cannot rule out migration or chance.

If individuals change color because they need to, ask whose offspring become more common.

5 Test a feedback model

Higher temperature triggers increased heat loss, reducing temperature and reducing the original stimulus. The downward trend is consistent with negative feedback, although exercise stopping also matters. The response should weaken near baseline.

If the loop keeps increasing heat loss forever, ask how the signal changes as temperature returns.

6 Separate association and mechanism

Reduced light could limit photosynthesis and growth. The lower-light pools also had less growth. Compare similar plants under controlled light levels while keeping nutrients and temperature constant. The pond comparison alone cannot isolate the mechanism.

If “floating plants kill everything” appears, ask which organisms and outcomes were actually measured.

Released practice for each week

Week 1 2026-01 • Q1 • Two Kinds of Twins (Q1–5)
Question booklet **Official mapping / guide**

Week 2 2026-06 • Q10 • Green and Black Frogs (Q10–14)
Question booklet **Official mapping / guide**

Week 3 2026-08 • Q45 • The Permafrost Problem (Q45–48)
Question booklet **Official mapping / guide**

Earth and Space Sciences

Released form evidence

All five released forms contained 50 slots. January 2026 included a drifting cargo spill, glacial ice and Mount Morris Dam. Ten January clusters included a model word cue, six a graph cue and five a map cue. The June mean graph count was 5.5; August was 7.

One January. A named New York location is a useful practice setting, with little basis for predicting which place will anchor the exam. Distinguish information in a reference table from information in a supplied map.

Eligible public forms • January 1 / June 2 / August 2

Worked responses and follow-up questions

1 Read a stream record

Peak recorded discharge was 12 m^3/s at 10. Water takes time to reach the channel and gauge. More pavement can reduce infiltration and speed runoff, producing an earlier or higher peak under otherwise similar conditions.

If rain and peak discharge are treated as simultaneous, trace a drop's route to the gauge.

2 Decode a contour crossing

A rise from the west and a descent to the east fit the data. The west flank is steeper because equal elevation changes occur over shorter distances. These crossings alone do not establish an exact summit elevation.

If higher is confused with steeper, compare equal elevation changes over the two distances.

3 Use relative time evidence

A deposited, B deposited, dike intruded, erosion truncated B and dike, C deposited. Superposition orders A and B. Cross-cutting and truncation place the dike after B and before the surface beneath C.

If the dike is youngest, ask whether it cuts C or ends below it.

Average clusters with an explicit word cue per released form

Feature	January	June	August
map	5.00	3.00	5.00
graph	6.00	5.50	7.00
model	10.00	9.00	8.50

A dash marks an unavailable month. Rows can overlap. See seasonal_evidence.csv for counts, uncertainty and the full feature set.

Official design or administration guidance

Earth and Space Sciences

4 Explain a seasonal difference

As Earth orbits with a relatively fixed axis direction, the Northern Hemisphere is tilted toward the Sun in June and has a longer illuminated path. At 43°S it is winter and daylight is shorter. Changing Earth-Sun distance cannot explain opposite seasons.

If distance is central, ask why both hemispheres experience the same distance on a given date.

5 Infer motion from paired locations

60 km / 2 million years = 30 km per million years, or 3 cm/year. New crust forms near the ridge and moves outward. Total separation of both plates would be about 6 cm/year.

If 6 cm/year is reported for one plate, distinguish one-sided travel from widening of the whole basin.

6 Make a watershed decision

A permeable surface or retention area could slow runoff and increase storage, lowering peak flow. The model connects more rapid runoff with higher peak. Soil saturation, slope or storm intensity could alter the result.

If a student promises flooding will stop, ask which outcome the model measured and under what storm.

Released practice for each week

Week 1 2026-01 • Q1 • Evidence for the Big Bang Theory (Q1–5)
Question booklet **Official mapping / guide**

Week 2 2026-06 • Q9 • The Slow Carbon Cycle (Q9–13)
Question booklet **Official mapping / guide**

Week 3 2026-08 • Q47 • Stars and Elements in the Universe (Q47–50)
Question booklet **Official mapping / guide**

Physical Science: Chemistry

Released form evidence

The two available forms had 11 clusters each. June contexts included beverages, blood equilibria and fabric. August included semiconductors, pool water and catalytic converters. Practice relating a macroscopic observation to a particle model and a data trend.

First January for the new exam. The 14 legacy chemistry forms measure a different design; older reference-table frequency cannot estimate the new cluster mix.

Eligible public forms • January 0 / June 1 / August 1

Worked responses and follow-up questions

1 Follow atoms through a model

Four water molecules form. Before and after there are eight H atoms and four O atoms. Mass and atom counts are conserved in the closed system. Molecule count changes from six to four.

If six product molecules appear, count atoms by element rather than comparing total molecules.

2 Temperature and the system boundary

The temperature rise supports energy transfer from the reaction to the solution and cup, consistent with an exothermic process. The comparison helps distinguish the rise from stirring or mixing water. It does not identify products.

If “heat entered because temperature rose” appears, ask whose temperature the thermometer measures.

3 Link a model to conductivity

X may consist of ions locked in a solid lattice that move in solution. Y may dissolve as neutral molecules. Identifying ions in X solution would strengthen the account. Conductivity alone does not uniquely identify a substance.

If all dissolved substances are said to conduct, compare the two solutions directly.

Average clusters with an explicit word cue per released form

Feature	January	June	August
model	—	3.00	6.00
diagram	—	1.00	1.00
table	—	1.00	0.00

A dash marks an unavailable month. Rows can overlap. See seasonal_evidence.csv for counts, uncertainty and the full feature set.

Official design or administration guidance

Physical Science: Chemistry

4 Interpret a reaction-rate curve

Rates are 0.70 and 1.25 mL/s from the shared zero baseline. Higher temperature increases the fraction of collisions energetic enough to react. Equal final volumes indicate comparable final gas yields under the stated comparison.

If final yield is called reaction rate, ask how much gas appeared in the first interval.

5 Read a reversible change

The reverse direction is favored immediately, consuming some added NO_2 and producing N_2O_4. At the new equilibrium the two rates are equal. Equal rates do not require equal concentrations.

If both rates are said to stop, explain how constant concentrations can coexist with particle-level changes.

6 Choose a model with evidence

Melting fits the change in order and mobility. During the plateau energy changes intermolecular arrangement and potential energy as solid becomes liquid. Evidence of new chemical species would challenge a phase-change-only model.

If chemical bonds inside molecules are said to break, distinguish particle identity from attractions between particles.

Released practice for each week

Week 1 2026-06 • Q1 • How Glow Became Gloom (Q1–5)
Question booklet **Official mapping / guide**

Week 2 2026-08 • Q10 • The Great American Solar Eclipse (Q10–13)
Question booklet **Official mapping / guide**

Week 3 2026-06 • Q46 • Indoor Air Pollution (Q46–50)
Question booklet **Official mapping / guide**

Physical Science: Physics

Released form evidence

The single public form included pendulum motion, heat exchange, helmet design, cell-phone optics and voice recognition. It had ten clusters, 31 selected responses and 19 constructed responses. Nine clusters contained an explicit diagram cue.

Only June 2026 is available in the corpus. The August schedule supplied no same-design form. January will be the first winter test, so all month comparisons are unestimated.

Eligible public forms • January 0 / June 1 / August 0

Worked responses and follow-up questions

1 Two force curves, one change in motion

Both impulses are 7.2 N·s. The longer pulse has half the force for twice the time. Equal impulses imply equal magnitudes of momentum change; the simplified result supports reducing peak force by extending contact time.

If the taller pulse is assigned greater impulse, draw both rectangles and label width and height.

2 Where the energy went

0.8 J is outside the listed mechanical-energy terms. Thermal energy in wheels or track, sound, or unmeasured rotation could contribute. Measure rotational speed or compare runs with changed friction before assigning the difference to a single mechanism.

If “energy disappeared” appears, expand the system and ask what was measured.

3 Use evidence from a wave

Wavelengths are 0.68 m and 0.34 m. Doubling frequency halves wavelength. Measure sound-pressure amplitude or intensity under comparable conditions to investigate loudness; frequency alone does not establish it.

If “higher pitch means louder” appears, ask which quantity determines cycles per second.

Average clusters with an explicit word cue per released form

Feature	January	June	August
diagram	—	9.00	—
model	—	7.00	—
graph	—	5.00	—

A dash marks an unavailable month. Rows can overlap. See seasonal_evidence.csv for counts, uncertainty and the full feature set.

Official design or administration guidance

Physical Science: Physics

4 Test a lens claim

Magnitude 15/30 = 0.5. Image height 2 cm and inverted. A real image can be projected onto a screen without a second imaging device.

If magnification is 2, compare whether the image distance is larger or smaller than the object distance.

5 Read electrical power as evidence

Inputs are 60 J and 42 J. The revision draws less energy, but efficiency requires useful output relative to input. Measure the same intended output, such as delivered light energy, for both trials.

If lower input is called higher efficiency, ask whether the second device could simply do less useful work.

6 Choose a design under two constraints

A and B both give 7.2 N·s. A meets both limits, including the 0.08 s maximum. B exceeds the force limit. Repeat A at varied incoming speeds or with measurement uncertainty near the time boundary.

If both are accepted solely on impulse, mark each design against each separate constraint.

Released practice for each week

Week 1 2026-06 • Q1 • Pendulum Motion (Q1–5)
Question booklet **Official mapping / guide**

Week 2 2026-06 • Q11 • Heat Exchange (Q11–14)
Question booklet **Official mapping / guide**

Week 3 2026-06 • Q46 • Charged Drops (Q46–50)
Question booklet **Official mapping / guide**

Physical Setting/Chemistry

Released form evidence

MC slots explicitly mapped to the 2011 reference tables averaged 20.5 in January, 22.4 in June and 19.8 in August. In January 2026, students worked with a gas sample, a cooling investigation, electrochemistry and neutralization in written-response sets.

The reference-table tag can accompany a content or process tag. Adding percentages across these tags double counts items. The new chemistry exam uses a different reference resource.

Eligible public forms • January 4 / June 5 / August 5

Worked responses and follow-up questions

1 Use a small reference table

At 85 °C ethanol is gas and water is liquid at equilibrium. Water's higher boiling point is consistent with stronger net intermolecular attractions. The supplied miniature table is an original practice aid.

If either is called solid, compare 85 with both melting temperatures.

2 Use electron accounting

Both have 17 protons and 18 neutrons. Electrons change from 17 to 18. An extra negative charge gives Cl^-. Its nucleus and isotope remain unchanged.

If mass number becomes 36, ask whether an electron changes the nuclear particle count.

3 Track a redox change

$Zn \rightarrow Zn^{2+} + 2e^-$ is oxidation. $Cu^{2+} + 2e^- \rightarrow Cu$ is reduction. Two electrons cancel. Zn is the reducing agent because it supplies the electrons that reduce copper ions.

If the oxidized species is called the oxidizing agent, ask which species supplied electrons to the other.

Average mapped multiple-choice slots per released form

Feature	January	June	August
Reference Tables / 2011 Edition	20.50	22.40	19.80
Standard 4 / Key Idea 3	37.00	36.20	39.20
Standard 4 / Key Idea 5	8.25	7.60	7.60

A dash marks an unavailable month. Rows can overlap. See seasonal_evidence.csv for counts, uncertainty and the full feature set.

Official design or administration guidance

Physical Setting/Chemistry

4 Check a mole ratio

3.0 mol H_2 needs 1.5 mol O_2, so H_2 limits. It produces 3.0 mol H_2O. Remaining O_2 is 0.5 mol. Coefficients compare amounts in moles.

If fewer moles automatically means limiting, calculate the amount needed for each partner.

5 Connect neutralization to quantity

$0.0250 \times 0.100 = 0.00250$ mol H^+. Equal moles OH^- are needed, giving $0.00250/0.0200 = 0.125$ mol/L. $H^+ + OH^- \rightarrow H_2O$.

If equal molarities are assumed, ask whether the reacting volumes are equal.

6 Read data before applying a rule

At 60 °C capacity is 100 g, so 90 g is unsaturated. At 20 °C capacity is 64 g. The excess $90 - 64 = 26$ g crystallizes. Quantities refer to mass of water, not total solution mass.

If the answer is 36 g, distinguish maximum initial capacity from the actual 90 g present.

Released practice for each week

Week 1 2026-06 • Q74 • Atoms and ions

Question booklet Official mapping / guide

Week 2 2026-08 • Q79 • Write a half-reaction

Question booklet Official mapping / guide

Week 3 2026-06 • Q79 • Solution concentration setup

Question booklet Official mapping / guide

Physical Setting/Physics

Released form evidence

The five public June forms each have 85 scoring slots. June 2026 includes a spring graph, point charges, photon emission, a roller-coaster energy situation, a circuit and a light ray crossing an interface. Several numbered slots share one underlying prompt.

No public January or August form in this series in the five-year window. The engine supplies June descriptions and abstains from a seasonal estimate. A restricted administration is never treated as a zero.

Eligible public forms • January 0 / June 5 / August 0

Worked responses and follow-up questions

1 Get the slope and the area

Slope = 6/3 = 2 m/s². Area = average velocity times time = (2+8)/2 × 3 = 15 m. Acceleration is slope and displacement is signed area.

If 6 m is reported as displacement, ask what quantity has units of m/s before multiplying by time.

2 Compare net and individual forces

Weight downward and normal upward balance. Initial horizontal net 15 N gives +3.0 m/s². With pull removed, net −9 N gives −1.8 m/s² until conditions change. Negative acceleration need not mean negative velocity.

If friction is omitted after release, ask what still touches the sled.

3 Use a parallel-circuit check

Currents are 2 A and 4 A. Total 6 A. Equivalent resistance 12/6 = 2 Ω, less than either branch. The additional path increases conductance.

If resistances are added directly, label voltage across each individual branch.

Average mapped multiple-choice slots per released form

Feature	January	June	August
Standard 4 / 5.1	—	23.00	—
Standard 4 / 4.1	—	11.40	—
Standard 4 / 4.3	—	10.80	—

A dash marks an unavailable month. Rows can overlap. See seasonal_evidence.csv for counts, uncertainty and the full feature set.

Official design or administration guidance

Physical Setting/Physics

4 Follow light at a boundary

sin $\theta_2 = 0.5/1.5 = 1/3$, so $\theta_2 \approx 19.5°$. It bends toward the normal as its speed decreases in higher-index glass. Angles are measured to the normal.

If the result exceeds 30°, check which material light enters and the ratio in Snell's law.

5 Translate an energy-level change

The atom loses 3.0 eV, so a photon is emitted with positive energy 4.8×10^{-19} J. Frequency E/h ≈ 7.2×10^{14} Hz. Distinguish the atom's negative change from photon energy.

If the photon energy is negative, write the energy lost by the atom and gained by radiation separately.

6 Link graph, work and speed

Stored energy = ½(12)(0.20) = 1.2 J. Ideal speed = √(2 × 1.2/0.40) ≈ 2.45 m/s. Measured translational energy is 0.80 J; friction, wheel rotation or other transfers could account for the 0.40 J difference.

If the student uses 12 × 0.20, compare the varying force with a rectangular constant-force graph.

Released practice for each week

Week 1 2025-06 • Q69 • Momentum plotted over time

Question booklet **Official mapping / guide**

Week 2 2025-06 • Q63 • Refraction and angle measurement

Question booklet **Official mapping / guide**

Week 3 2024-06 • Q78 • Wave frequency

Question booklet **Official mapping / guide**