NOVEMBER 2026 / JANUARY 2027 PLANNING

Physical Setting/Chemistry atlas

Standards, score design, seasonal evidence, public stimuli, scored work and original transfer tasks.

Tue Jan 26 · 1:15 p.m. | Official January 2027 schedule

January forms	June forms	August forms	Printed slots
4	5	5	1190

What the available design supports

The legacy blueprint is a separate January option. The 14 public forms each have 85 scoring slots, with 50 selected responses and 35 constructed-response slots. Multiple official mappings can attach to the same slot.

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.

NYSED course guide / administration authority

A useful preparation decision

Select a recurring evidence demand, compare the official scoring criterion with a response, then change context for an independent check. The six new topic cards below broaden practice. Their contexts are original designs, and their exact future appearance has no estimated probability.

Topic	Original card
Atomic identity	CHEM_LEG-N01 Isotopes in a sample
Oxidation and reduction	CHEM_LEG-N02 Count the electrons
Gas relationships	CHEM_LEG-N03 A gas model has a condition
Dynamic equilibrium	CHEM_LEG-N04 The amount still dissolving
Solutions and quantities	CHEM_LEG-N05 A dilution with a final volume
Energy transfer	CHEM_LEG-N06 Heat in an insulated cup

Blueprint and score contribution

The legacy blueprint is a separate January option. The 14 public forms each have 85 scoring slots, with 50 selected responses and 35 constructed-response slots. Multiple official mappings can attach to the same slot. The source corpus describes printed slots. It does not create an updated blueprint or a January seasonal estimate for restricted material.

Preserve the scoring interpretation

A local response criterion supports feedback about that task. A shortened exam or modified full-length assembly lacks the state form's validated conversion. Report separate evidence for independent and prompted work. Preserve item weights when describing coverage.

Code ledger and form prevalence

Each row reports forms with at least one valid matching slot. A count such as 1/2 is a form prevalence, not student accuracy. Codes are retained at their actual mapping granularity. ELA writing tasks carry broad mappings and are excluded from this frequency ledger.

Published code / label	Jan	June	Aug	All
Reference Tables / 2011 Edition	4/4	5/5	5/5	14/14
Standard 1 / Math Key Idea 1	4/4	5/5	5/5	14/14
Standard 1 / Math Key Idea 2	4/4	5/5	5/5	14/14
Standard 1 / Math Key Idea 3	4/4	5/5	5/5	14/14
Standard 1 / Science Inquiry Key Idea 1	4/4	5/5	5/5	14/14
Standard 1 / Science Inquiry Key Idea 2	2/4	0/5	0/5	2/14
Standard 1 / Science Inquiry Key Idea 3	4/4	5/5	5/5	14/14
Standard 2 / Key Idea 1	1/4	0/5	0/5	1/14
Standard 2 / Key Idea 2	0/4	0/5	1/5	1/14
Standard 4 / Key Idea 3	4/4	5/5	5/5	14/14
Standard 4 / Key Idea 4	4/4	5/5	5/5	14/14
Standard 4 / Key Idea 5	4/4	5/5	5/5	14/14
Standard 4 Process Skills / Key Idea 3	4/4	5/5	5/5	14/14
Standard 4 Process Skills / Key Idea 4	4/4	5/5	5/5	14/14
Standard 4 Process Skills / Key Idea 5	4/4	5/5	5/5	14/14
Standard 6 / Key Idea 1	2/4	3/5	0/5	5/14
Standard 6 / Key Idea 2	4/4	4/5	5/5	13/14
Standard 6 / Key Idea 3	4/4	3/5	3/5	10/14
Standard 6 / Key Idea 4	1/4	1/5	3/5	5/14
Standard 6 / Key Idea 5	4/4	2/5	3/5	9/14

Zero observed January forms provide no winter rate. Multiple codes can describe the same slot. Labels are short teaching descriptions, and official code wording and its boundary remain authoritative.

Topics, trend and stimulus hypotheses

Atomic identity

Standard 4 / Key Idea 3
January 4/4 | June 5/5 | August 5/5

Pooled planning probability 93.8% for a union of named codes in 14/14 forms. Nominal observed-prevalence interval 78%-100%. Union of named official codes on valid printed scoring slots in fully mapped target forms.

Design hypothesis constructed isotope data using isotope abundance graph. Preserve the target relationship and change the setting.

Oxidation and reduction

Standard 4 / Key Idea 3
January 4/4 | June 5/5 | August 5/5

Pooled planning probability 93.8% for a union of named codes in 14/14 forms. Nominal observed-prevalence interval 78%-100%. Union of named official codes on valid printed scoring slots in fully mapped target forms.

Design hypothesis half-reaction model using metal-ion reaction. Preserve the target relationship and change the setting.

Gas relationships

Standard 4 / Key Idea 3
January 4/4 | June 5/5 | August 5/5

Pooled planning probability 93.8% for a union of named codes in 14/14 forms. Nominal observed-prevalence interval 78%-100%. Union of named official codes on valid printed scoring slots in fully mapped target forms.

Design hypothesis constructed gas data using gas syringe. Preserve the target relationship and change the setting.

Dynamic equilibrium

Standard 4 / Key Idea 3
January 4/4 | June 5/5 | August 5/5

Pooled planning probability 93.8% for a union of named codes in 14/14 forms. Nominal observed-prevalence interval 78%-100%. Union of named official codes on valid printed scoring slots in fully mapped target forms.

Design hypothesis constructed rate table using saturated solution. Preserve the target relationship and change the setting.

Solutions and quantities

Standard 4 / Key Idea 3
January 4/4 | June 5/5 | August 5/5

Pooled planning probability 93.8% for a union of named codes in 14/14 forms. Nominal observed-prevalence interval 78%-100%. Union of named official codes on valid printed scoring slots in fully mapped target forms.

Design hypothesis constructed preparation using neutralization data. Preserve the target relationship and change the setting.

Energy transfer

Standard 4 / Key Idea 4
January 4/4 | June 5/5 | August 5/5

Pooled planning probability 93.8% for a union of named codes in 14/14 forms. Nominal observed-prevalence interval 78%-100%. Union of named official codes on valid printed scoring slots in fully mapped target forms.

Design hypothesis constructed calorimetry using heating curve. Preserve the target relationship and change the setting.

The contexts are possible practice stimuli. Their probabilities are unestimated. The quantitative estimates apply only to the named mapped-code event. Rows overlap and are not additive.

Observed public stimuli by topic

This route has item-level codes and public questions, with no inherited cluster-format catalog. Use the linked exemplars on the next page.

A source-set overlap with a code is broader than a one-to-one match between the format and the entire expectation. The full CSV retains all observed sets and joins.

Released item exemplars and mappings

Atomic identity / CHEM_LEG-N01

Practice evidence 0.75(20)+0.25(22)=20.5 u.

CHEM_LEG_2026_08_85 public question

Official published mapping

Verification route Atlas source-linked mapping

Oxidation and reduction / CHEM_LEG-N02

Practice evidence Mg -> Mg2+ + 2e-.

CHEM_LEG_2026_08_85 public question

Official published mapping

Verification route Atlas source-linked mapping

Gas relationships / CHEM_LEG-N03

Practice evidence V2=2.0(450/300)=3.0 L.

CHEM_LEG_2026_08_85 public question

Official published mapping

Verification route Atlas source-linked mapping

Dynamic equilibrium / CHEM_LEG-N04

Practice evidence Forward and reverse changes continue while their effects on amounts cancel.

CHEM_LEG_2026_08_85 public question

Official published mapping

Verification route Atlas source-linked mapping

Solutions and quantities / CHEM_LEG-N05

Practice evidence n=2.0(0.025)=0.050 mol.

CHEM_LEG_2026_08_85 public question

Official published mapping

Verification route Atlas source-linked mapping

Energy transfer / CHEM_LEG-N06

Practice evidence q=50(4.18)(6)=1254 J.

CHEM_LEG_2026_08_75 public question

Official published mapping

Verification route Atlas source-linked mapping

The connection is a shared published code. Compare the complete tasks before treating them as equivalent practice.

Account for transferred electrons

CHEM_LEG_2026_06 Q58 | Published result 1 credit criterion

Observed evidence

The guide describes an equality between the number of electrons lost by beryllium and gained by fluorine.

Possible interpretation

A student may know which species loses electrons but miss the quantitative relationship.

Diagnostic prompt

Count electrons lost and gained for the whole reaction. How can the totals be checked?

Teaching move

Write the two electron counts side by side and rescale the half-reactions until they agree.

Public task

Sample or criterion

Commentary

Official mapping

This is a selected released example or criterion. Local student work was not supplied. Preserve alternate explanations until a new response distinguishes them.

Separate element identity from isotope mass

CHEM_LEG_2026_06 Q68 | Published result 1 credit criterion

Observed evidence

Both europium isotopes have 63 protons. The guide distinguishes their neutron counts.

Possible interpretation

A student may interpret the mass-number change as a change in charge or element identity.

Diagnostic prompt

What must stay fixed for both atoms to be europium? What can change?

Teaching move

Build a proton-neutron-electron table for two isotopes, then change the charge of just one to contrast ion formation.

Public task

Sample or criterion

Commentary

Official mapping

This is a selected released example or criterion. Local student work was not supplied. Preserve alternate explanations until a new response distinguishes them.

Explain dynamic equilibrium

CHEM_LEG_2026_06 Q80 | Published result 1 credit criterion

Observed evidence

The guide describes equilibrium through equal forward and reverse reaction rates.

Possible interpretation

A local answer claiming equal amounts or stopped reactions suggests a question about rate versus quantity.

Diagnostic prompt

Can two containers have different numbers of particles while particles transfer at equal rates?

Teaching move

Draw unequal populations with equal transfer arrows. Change the transfer rates and predict how the counts evolve.

Public task

Sample or criterion

Commentary

Official mapping

This is a selected released example or criterion. Local student work was not supplied. Preserve alternate explanations until a new response distinguishes them.

Six original contexts and the prep route

Card	Target relationship	Transfer condition
CHEM_LEG-N01 Isotopes in a sample	Find the weighted average atomic mass.	Change the abundance of X-22 to 50% and revise the mean.
CHEM_LEG-N02 Count the electrons	Complete the half-reaction.	Write the reverse half-reaction and explain the classification.
CHEM_LEG-N03 A gas model has a condition	Calculate the final volume.	Hold volume fixed instead and compare the pressure ratio.
CHEM_LEG-N04 The amount still dissolving	Explain why stable amounts can coexist with continuing reactions.	Add reactant and describe the initial imbalance before a new equilibrium.
CHEM_LEG-N05 A dilution with a final volume	Find the initial amount of solute in moles.	Prepare the same final concentration using a different starting volume and justify the proportional relationship.
CHEM_LEG-N06 Heat in an insulated cup	Calculate energy gained by water.	Double the water mass with the same energy input and predict the temperature rise.

Retained three-week Studio sequence

Week 1 session 1 Use a small reference table

Week 1 session 2 Use electron accounting

Week 2 session 3 Track a redox change

Week 2 session 4 Check a mole ratio

Week 3 session 5 Connect neutralization to quantity

Week 3 session 6 Read data before applying a rule

The practice folder contains the prior standalone original exam, Form B rehearsal insert and directions, exam guide, six-session student prep and worked responses. Separate new stimulus student and teacher books add these six contexts. Use the full-length public booklet links in the assembly map.

Connections and department decisions

CHEM_LEG-N01 Isotopes in a sample

Taking the unweighted mean of isotope masses or changing proton number. This is a diagnostic hypothesis. Ask the learner to explain the step before selecting a response.

Related reasoning ALG1-N04 Same center, different repair times, ALG1-N06 Measuring foam panels

CHEM_LEG-N02 Count the electrons

Balancing atoms while leaving electrical charge unbalanced. This is a diagnostic hypothesis. Ask the learner to explain the step before selecting a response.

Related reasoning ALG1-N05 Labels on an exponential model, BIO-N03 Where does the dry mass come from?

CHEM_LEG-N03 A gas model has a condition

Using Celsius ratios in an absolute-temperature gas relationship. This is a diagnostic hypothesis. Ask the learner to explain the step before selecting a response.

Related reasoning ALG1-N04 Same center, different repair times, ALG1-N06 Measuring foam panels

CHEM_LEG-N04 The amount still dissolving

Describing equilibrium as both reactions stopping. This is a diagnostic hypothesis. Ask the learner to explain the step before selecting a response.

Related reasoning ALG1-N05 Labels on an exponential model, BIO-N03 Where does the dry mass come from?

CHEM_LEG-N05 A dilution with a final volume

Using 75 mL of added solvent as the final solution volume. This is a diagnostic hypothesis. Ask the learner to explain the step before selecting a response.

Related reasoning ALG1-N04 Same center, different repair times, ALG1-N06 Measuring foam panels

CHEM_LEG-N06 Heat in an insulated cup

Using the final temperature as the temperature change. This is a diagnostic hypothesis. Ask the learner to explain the step before selecting a response.

Related reasoning ALG1-N05 Labels on an exponential model, BIO-N03 Where does the dry mass come from?

Use the anonymous calibration record to preserve the initial judgments, criterion evidence, an instructional move and a new independent response. Review the same reasoning in a changed context and record prior exposure.