
Alabama 11 Chemistry / Advanced Science

FREE PREVIEW

Full-Year Teacher Planner, Blank Editable Planner & School-Submission Binder

This preview shows the real structure and a genuine sample of the completed planner. The full product contains 9 units, 36 weekly plans and 180 daily plans, plus blank editable versions of every form.

State	Alabama
Grade	11 (High)
Subject	Chemistry / Advanced Science
Course category	Science
Standards family	Science
Framework	2023 Alabama Course of Study: Science
Issuing agency	Alabama State Department of Education
Scope	36 instructional weeks · 180 instructional days · 9 units

This is a statewide standards index, not a local course catalog. Course names, grade placement, electives, and graduation sequences vary by district.

What you get

Folder	Contents
01 START HERE	Read-me, contents, printing and digital instructions, standards verification guide, this preview
02 FILLED FULL YEAR	Completed planner in colour and ink-friendly PDF, plus editable DOCX
03 BLANK EDITABLE	Blank planner in colour, ink-friendly and fillable PDF, plus editable DOCX
04 ASSESSMENTS AND DATA	Baseline observation, quarterly rubrics, anecdotal forms, portfolio checklist
05 SCHOOL SUBMISSION	Submission covers, alignment summary, evidence checklist, observation, reflection, signature page
06 LICENSE AND CREDITS	Terms of use, credits and licences, copyright notice

The pages that follow are reproduced **exactly** as they appear in the full completed planner.

Week 9 — Ionic Bonding

Unit 3: Forces Within Molecules · Month 3 · Quarter 1 · Semester 1 · Instructional Days 41–45

Essential question	What happens when an atom that wants to lose meets one that wants to gain?
Standards	Forces Within and Between Molecules → Standard 2 Motion and Stability: Forces and Interactions / Atomic and Molecular Interactions — Construct explanations of the formation of intramolecular and intermolecular forces and their effects on atomic and molecular interactions.
Learning target	"I can construct an explanation of how ionic bonds form and what they produce."
Local dates	_____ (enter your school dates)

Measurable objectives

- Students will construct explanations of the formation of intramolecular and intermolecular forces and their effects on atomic and molecular interactions.

Success criteria (student-friendly)

- "I explain ionic bond formation from electron transfer."
- "I predict formulae from ion charges."
- "I explain ionic compounds' properties from their structure."

Academic vocabulary

ionic bond, electron transfer, cation, anion, lattice, electrostatic attraction, formula unit, brittle

Materials and technology

- Notebooks
- Periodic tables
- Whatever lattice models the school holds

Differentiation and supports

Support area	This week's plan
Special education / IEP	Reduce group size; pair visual cue cards with all verbal directions; allow gesture or picture response in place of speech; pre-teach the week's target in a 1:1 warm-up.
Section 504	Provide the child's documented accommodations throughout; permit movement breaks and alternative seating at any point in the sequence.
Multilingual learners	Introduce each vocabulary word with an object or image; accept home-language responses; send the vocabulary list home where a translation is available; pair with a peer who shares the home language.
Advanced / extension	Ask the learner to teach the skill to a peer, extend the task, or record a demonstration for the class reference wall.
Intervention / reteach	Reteach the target in a short small group using the same materials; split the day's check for understanding into two smaller steps.

Support area	This week's plan
Enrichment	Extend into an open-ended centre or project connected to the essential question.

Assessment and evidence

Student explains ionic bonding and derives properties from structure.

Family communication

Ask your child why salt is brittle rather than bendy.

Day 41 — The Standard Says CONSTRUCT EXPLANATIONS

Week 9, Day 1 · Unit 3 · Standards: Standard 2

Focus	The practice.
Learning target	"I can construct an explanation of how ionic bonds form and what they produce."
Vocabulary in use	ionic bond, electron transfer, cation, anion, lattice, electrostatic attraction, formula unit, brittle
Local date	_____

Learning sequence

Connect: standard 2 governs Units 3 and 4. Teach: its verb is CONSTRUCT EXPLANATIONS of how forces FORM and their EFFECTS - so the target throughout is a causal chain from electron behaviour to observable property, not a set of definitions. INTRAMOLECULAR forces are within a particle and are this unit; INTERMOLECULAR forces are between particles and are Unit 4, and confusing them is the commonest error in the topic. Try: shared reading of the standard and its two halves. Apply: students state the difference in their own words with an example. Reflect: intra means within; inter means between.

Check for understanding

Student distinguishes intramolecular from intermolecular forces.

Differentiation in the moment

If the learner...	Then...
needs more support	Model the step again with guided support, then fade to a gesture cue.
is ready for more	Invite the learner to demonstrate for a peer or add a second example.
is dysregulated	Pause instruction, move to co-regulation, and return to the target later.

Closure and reflection

Gather the group. Restate the learning target. Ask one learner to demonstrate. Name one specific thing the group did well, then preview tomorrow.

Teacher reflection (fictional example)

Fictional Example — Customize and Verify Before School Submission.

Most learners met the target. Two needed the visual cue repeated during guided practice; I will pre-teach with them tomorrow. The extension held attention longer than planned, so I shortened closure.

Day 42 — Transfer, and Why It Happens

Week 9, Day 2 · Unit 3 · Standards: Standard 2

Focus	Formation.
Learning target	"I can construct an explanation of how ionic bonds form and what they produce."
Vocabulary in use	ionic bond, electron transfer, cation, anion, lattice, electrostatic attraction, formula unit, brittle
Local date	_____

Learning sequence

Connect: Week 6's electronegativity. Teach: when the difference in electronegativity is large, the more electronegative atom takes the electron outright - both particles reach a stable arrangement, and the resulting opposite charges attract electrostatically. That attraction IS the ionic bond; nothing is shared. Try: shared construction of the explanation for one pair. Apply: students construct explanations for three pairs. Reflect: the bond is a consequence of the transfer, not a thing added to it.

Check for understanding

Student constructs a causal explanation of ionic bond formation.

Differentiation in the moment

If the learner...	Then...
needs more support	Model the step again with guided support, then fade to a gesture cue.
is ready for more	Invite the learner to demonstrate for a peer or add a second example.
is dysregulated	Pause instruction, move to co-regulation, and return to the target later.

Closure and reflection

Gather the group. Restate the learning target. Ask one learner to demonstrate. Name one specific thing the group did well, then preview tomorrow.

Teacher reflection (fictional example)

Fictional Example — Customize and Verify Before School Submission.

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Day 43 — Predicting Formulae

Week 9, Day 3 · Unit 3 · Standards: Standard 2

Focus	Ratios from charges.
Learning target	"I can construct an explanation of how ionic bonds form and what they produce."
Vocabulary in use	ionic bond, electron transfer, cation, anion, lattice, electrostatic attraction, formula unit, brittle
Local date	_____

Learning sequence

Connect: Week 2 predicted charges. Teach: an ionic compound is electrically neutral overall, so the ions combine in whatever ratio cancels the charges - which means the formula is PREDICTABLE from position on the table alone. Try: shared derivation for supplied pairs. Apply: students predict formulae for eight pairs from position. Reflect: the table predicted a formula, which is a satisfying amount of leverage.

Check for understanding

Student predicts ionic formulae from periodic position.

Differentiation in the moment

If the learner...	Then...
needs more support	Model the step again with guided support, then fade to a gesture cue.
is ready for more	Invite the learner to demonstrate for a peer or add a second example.
is dysregulated	Pause instruction, move to co-regulation, and return to the target later.

Closure and reflection

Gather the group. Restate the learning target. Ask one learner to demonstrate. Name one specific thing the group did well, then preview tomorrow.

Teacher reflection (fictional example)

Fictional Example — Customize and Verify Before School Submission.

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Day 44 — A Lattice, Not a Molecule

Week 9, Day 4 · Unit 3 · Standards: Standard 2

Focus	Structure.
Learning target	"I can construct an explanation of how ionic bonds form and what they produce."
Vocabulary in use	ionic bond, electron transfer, cation, anion, lattice, electrostatic attraction, formula unit, brittle
Local date	_____

Learning sequence

Connect: what is a 'molecule' of salt? Teach: there is none - ionic compounds form a continuous LATTICE in which each ion is surrounded by oppositely charged neighbours, so the formula gives the RATIO rather than counting a particle. This distinction matters for everything that follows. Try: shared examination of whatever lattice models the school holds. Apply: students explain why the formula is a ratio and not a count. Reflect: 'formula unit' rather than 'molecule', and the words are doing work.

Check for understanding

Student explains ionic structure as a lattice with a ratio formula.

Differentiation in the moment

If the learner...	Then...
needs more support	Model the step again with guided support, then fade to a gesture cue.
is ready for more	Invite the learner to demonstrate for a peer or add a second example.
is dysregulated	Pause instruction, move to co-regulation, and return to the target later.

Closure and reflection

Gather the group. Restate the learning target. Ask one learner to demonstrate. Name one specific thing the group did well, then preview tomorrow.

Teacher reflection (fictional example)

Fictional Example — Customize and Verify Before School Submission.

Most learners met the target. Two needed the visual cue repeated during guided practice; I will pre-teach with them tomorrow. The extension held attention longer than planned, so I shortened closure.

Day 45 — Explaining the Properties

Week 9, Day 5 • Unit 3 • Standards: Standard 2

Focus	The week's product.
Learning target	"I can construct an explanation of how ionic bonds form and what they produce."
Vocabulary in use	ionic bond, electron transfer, cation, anion, lattice, electrostatic attraction, formula unit, brittle
Local date	_____

Learning sequence

Connect: the standard says AND THEIR EFFECTS. Teach: build the chain - strong electrostatic attraction throughout a lattice gives high melting points; ions fixed in place give poor conduction when solid but good conduction when molten or dissolved; and displacing a layer brings like charges together, which is why ionic solids shatter rather than bend. Try: shared construction of one chain. Apply: students explain four properties from structure and file the work. Reflect: brittleness follows from charge arrangement, which is a genuinely satisfying explanation.

Check for understanding

Student explains ionic properties by causal chains from structure.

Differentiation in the moment

If the learner...	Then...
needs more support	Model the step again with guided support, then fade to a gesture cue.
is ready for more	Invite the learner to demonstrate for a peer or add a second example.
is dysregulated	Pause instruction, move to co-regulation, and return to the target later.

Closure and reflection

Gather the group. Restate the learning target. Ask one learner to demonstrate. Name one specific thing the group did well, then preview tomorrow.

Teacher reflection (fictional example)

Fictional Example — Customize and Verify Before School Submission.

Most learners met the target. Two needed the visual cue repeated during guided practice; I will pre-teach with them tomorrow. The extension held attention longer than planned, so I shortened closure.

Important before you buy

- This is a **digital download**. Nothing is shipped.
- The planner is **calendar-neutral**: Month 1–9, Week 1–36, Day 1–180, so it fits any school calendar. You add your own dates.
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Source citation

Alabama State Department of Education. 2023 Alabama Course of Study: Science. THIS ENTRY IS THE HIGH SCHOOL CHEMISTRY COURSE, PDF pages 83-87, derived from the running head. The high school section is organised BY COURSE rather than by grade: Biology, Chemistry, Earth and Space Science, Environmental Science, Human Anatomy and Physiology, Physical Science and Physics sit back to back, each numbered from 1 in an identical layout, so a page-range slip lands inside a different course and looks plausible. Chemistry has SEVEN content standards, which is normal for this document at high school -- Biology has 15 and Physical Science 6 -- because each standard is a broad performance expectation rather than a single fact. Each carries a Disciplinary Core Idea and a sub-topic, both transcribed. Crosscutting Concepts are printed in a separate right-hand column and are NOT sub-topics; treating them as such would file standards under Patterns or Cause and Effect instead of the document's own topic heading. Lettered sub-parts and Examples runs are not reproduced; the numbered statement is the citable standard. THIS GRADE 11 ENTRY IS THE SAME CHEMISTRY COURSE AS THE GRADE 10 ENTRY. The 2023 Course of Study: Science organises high school content BY COURSE and assigns no course to a named grade, so a Grade 11 chemistry class is held to exactly the same seven standards; writing a different year against an identical set would invent a distinction the state does not make. THE ROW'S "ADVANCED SCIENCE" LABEL NAMES NO ALABAMA COURSE: the state's other advanced options are Earth and Space Science, Environmental Science and Human Anatomy and Physiology, each with its own distinct standards, and the listing names all three so a department teaching one of them knows this is not their product. Retrieved 2026-07-27 from https://www.alabamaachieves.org/wp-content/uploads/2024/02/AS_20240213_2023-Alabama-Course-of-Study-Science_V1.0.pdf