SUBJECT PROMPT GUIDE

CLIL AI Prompts for Chemistry

14 ready-to-use prompts, planning notes and teacher checks for secondary or VET science learners

Practical planning material for use with the CLIL AI application or independently

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Start with the subject goal

A useful CLIL prompt begins with what students should understand or be able to do. Language support is then planned around that goal.

Sample content goal
use evidence to classify substances and explain how pH relates to acidity and alkalinity

Content	use evidence to classify substances and explain how pH relates to acidity and alkalinity
Communication	classify, describe observations, explain a reaction, compare results and justify a conclusion
Language of learning	acid, base, alkali, indicator, neutralisation, ion, concentration, pH scale
Possible final product	a practical results table, safety-aware method and evidence-based conclusion
Teacher verification	equations, charges, units, safety procedures, chemical names, concentrations and disposal advice

How to use this guide

Copy a prompt into the CLIL AI application. Replace the sample topic, learner details, source and timing. Generate one useful section at a time when a complete lesson would be too broad. Review all subject content and edit the result for the real class.

Plan and adapt

Prompts 1 to 3 of 14

01. Build a complete CLIL lesson

Use in Lesson Creator when starting from a clear curriculum goal.

Paste into the application

You are supporting a Chemistry teacher. Create a 60-minute CLIL lesson on acids, bases and pH for secondary or VET science learners working at approximately B1-B2 English. The content goal is to use evidence to classify substances and explain how pH relates to acidity and alkalinity. Include one content objective, two language objectives, 6 to 8 key terms, a short input stage, a collaborative task, visible sentence support, a final product and a five-minute content check. Keep the subject challenge appropriate for the age group. List the points the teacher must verify before use.

Teacher edit: Replace the sample timing, learner level and final product with details from the real class.

02. Convert an existing lesson

Use when the subject lesson already exists but the language dimension is missing.

Paste into the application

Turn my existing Chemistry lesson on rates of reaction and chemical bonding into a CLIL lesson for secondary or VET science learners working at approximately B1-B2 English. Keep the original content outcome. Identify the language of learning, language for learning and likely language through learning. Add only the scaffolds needed for students to understand the source, take part in the main task and explain their reasoning. Add one short communication task and one content-focused exit check. Do not rewrite parts of the lesson that are already suitable.

Teacher edit: Attach or paste only source material you have permission to process.

03. Adapt a subject text

Use in Language Tools or to refine a selected source.

Paste into the application

Adapt the following Chemistry source to approximately B1-B2 for classroom use. Preserve the central meaning, evidence, qualifications, subject terminology and any necessary sequence. Shorten dense sentences, explain difficult general academic words and organise the text with clear headings. Keep these terms unless they are genuinely unnecessary: acid, base, alkali, indicator, neutralisation, ion, concentration, pH scale. At the end, list any meaning that may have changed and any statement the teacher should verify against the original.

Teacher edit: Compare the adaptation line by line with the original before teaching.

Build access to input

Prompts 4 to 6 of 14

04. Create parallel versions

Use for mixed levels without changing the shared subject goal.

Paste into the application

Create two parallel versions of this text on rates of reaction and chemical bonding, one at approximately A2-B1 and one at B2. Keep the same core subject ideas, evidence and key terminology. In the more accessible version, reduce language density and add short definitions. In the B2 version, retain more technical detail and use more complex cause-and-effect language. Add the same four content questions to both versions so the class can rejoin for discussion.

Teacher edit: Do not label one version as weak or easy when distributing it to students.

05. Prepare essential vocabulary

Use before reading, listening or practical work.

Paste into the application

Create a vocabulary support sheet for a Chemistry lesson on acids, bases and pH. Use these terms as a starting point: acid, base, alkali, indicator, neutralisation, ion, concentration, pH scale. For each term, provide a concise subject-correct definition, one example in context, one likely confusion or non-example and one sentence frame students can use. Separate technical terms from general academic language. Limit the final list to the 8 terms most necessary for the lesson goal.

Teacher edit: Check every definition against a trusted subject source and remove words students already know.

06. Build a three-stage reading task

Use with a selected textbook, article, report or technical source.

Paste into the application

Turn this a teacher-approved practical method, safety data and chemistry textbook extract into a three-stage CLIL reading task for secondary or VET science learners working at approximately B1-B2 English. Before reading, activate prior knowledge and pre-teach no more than 6 essential terms. During reading, use one gist question, one evidence-finding task and one diagram or note-making structure. After reading, require students to classify, describe observations, explain a reaction, compare results and justify a conclusion. Include answer guidance that distinguishes evidence from acceptable alternative wording.

Teacher edit: Check that the questions can be answered from the source and do not reward guessing from language clues.

Make students use the subject

Prompts 7 to 9 of 14

07. Structure purposeful speaking

Use when students understand the topic but need support to discuss it.

Paste into the application

Create a structured pair or group discussion for acids, bases and pH for secondary or VET science learners working at approximately B1-B2 English. Students must classify, describe observations, explain a reaction, compare results and justify a conclusion. Give each learner a useful role, provide 6 concise sentence frames and require a clear group decision or product. Include two follow-up questions that ask students to explain or challenge reasoning respectfully. Avoid a role-play. Keep the focus on the subject decision, not on perfect grammar.

Teacher edit: Choose roles that distribute thinking and speaking, not only administration.

08. Design an applied subject task

Use for project work, practical work or problem solving.

Paste into the application

Design a CLIL task in which students produce a practical results table, safety-aware method and evidence-based conclusion. Provide a realistic brief, success criteria, materials, staged instructions and a 45 to 90 minute timing plan. The task must require students to apply Chemistry knowledge and use English to explain decisions. Include language support for planning, asking for clarification, comparing options and justifying the final choice. Add a short teacher checkpoint before students commit to the final product.

Teacher edit: Replace fictional figures or constraints with values that match the curriculum and available equipment.

09. Support subject writing

Use for explanations, reports, evaluations or recommendations.

Paste into the application

Create a writing frame for a practical results table, safety-aware method and evidence-based conclusion. Include a clear paragraph or section structure, subject-specific sentence starters, linking language for cause, contrast and evidence, and a self-check list. Provide a short model paragraph that demonstrates organisation but does not complete the students' task. The main assessment emphasis should remain on use evidence to classify substances and explain how pH relates to acidity and alkalinity.

Teacher edit: Make sure the model does not contain claims or values students could copy without thinking.

Differentiate and assess

Prompts 10 to 12 of 14

10. Create a listening and note-making task

Use with teacher explanation, a permitted video or text-to-speech.

Paste into the application

Create a two-listen CLIL activity on rates of reaction and chemical bonding for secondary or VET science learners working at approximately B1-B2 English. Before listening, provide 5 key terms and a prediction question. On the first listen, students identify the main purpose and three key ideas. On the second listen, they complete a structured note grid and record one piece of evidence. Finish with a pair comparison and one content question. Provide a transcript-check list for the teacher, especially for technical pronunciation.

Teacher edit: Verify pronunciation, names, numbers and specialist terms before using synthetic speech.

11. Differentiate support, not the subject goal

Use when one class contains several English levels.

Paste into the application

Create three support routes for the same Chemistry task on acids, bases and pH. Keep this shared content goal: students will use evidence to classify substances and explain how pH relates to acidity and alkalinity. Route 1 should provide chunked input, a glossary and sentence frames. Route 2 should provide guiding questions and lighter frames. Route 3 should reduce scaffolding and add an extension requiring evaluation or transfer. All routes must lead to a comparable final product and shared discussion.

Teacher edit: Allow movement between routes and avoid public labels based on ability.

12. Check learning during the lesson

Use to build formative checks that separate content from language.

Paste into the application

Create a formative assessment sequence for the lesson on acids, bases and pH. Include one quick prior-knowledge check, three content questions of increasing cognitive demand, one task requiring students to explain reasoning using key language, and a final exit ticket. Provide expected content points and note where imperfect English should not hide correct subject understanding.

Teacher edit: Adjust the weighting so language accuracy does not replace the intended subject outcome.

Assess and verify

Prompts 13 to 14 of 14

13. Create a dual-focus rubric

Use for a product, practical task or group explanation.

Paste into the application

Draft a four-level rubric for a practical results table, safety-aware method and evidence-based conclusion. Include separate criteria for subject accuracy, application of knowledge, evidence or method, clarity of communication and use of essential technical language. Describe observable performance at each level. Do not reward decorative presentation unless it is part of the curriculum. Add a suggested weighting that gives subject learning the largest share.

Teacher edit: Edit descriptors to match local assessment policy and show students the criteria before the task.

14. Run a subject accuracy check

Use after generation and before the material reaches students.

Paste into the application

Review the generated Chemistry material. Flag anything that may be inaccurate, outdated, overgeneralised or unsuitable for the learners. Check specifically for equations, charges, units, safety procedures, chemical names, concentrations and disposal advice. Look for these common misconceptions: equating strong with concentrated, assuming all acids are dangerous, or treating pH as a linear scale. Separate definite errors from points that require a trusted source or teacher judgement. Do not silently rewrite the material. Return a correction list with the exact section that needs attention.

Teacher edit: Complete the final check yourself using curriculum documents and trusted subject sources.

Before you use the output

The application produces a draft. The teacher decides what is accurate, suitable and worth keeping.

Subject and CLIL review

CHECK	The content objective matches the curriculum and is visible in the main task.
CHECK	Technical details have been checked, especially equations, charges, units, safety procedures, chemical names, concentrations and disposal advice.
CHECK	Language support helps students take part without completing the thinking for them.
CHECK	The source may be used and no personal or sensitive learner data has been entered.
CHECK	The main task requires a subject decision, explanation, product or solution.
CHECK	Instructions, grouping and timing fit the real classroom.
CHECK	Content and language criteria are clear and weighted deliberately.
CHECK	The teacher has removed invented references, unusable links and generic filler.

Keep a proven prompt
Save prompts that worked. Next time, change only the topic, source, learner level, timing or type of support. Small controlled changes make it easier to see why an output improved.