



A Teacher's Guide

What is an ALEKS Notebook?

The ALEKS Notebook is more than a place for scratch work—it's a powerful tool that helps students take ownership of their learning. Whether students are solving equations, analyzing mistakes, tracking progress, or reflecting on their growth, the notebook becomes a personal space to think, plan, question, and make connections.

When used intentionally, the ALEKS Notebook turns passive learning into active engagement. It promotes deeper understanding, encourages self-monitoring, and gives students a way to "talk back" to their math journey.

This guide shares ready-to-use strategies to transform the ALEKS

Notebook into a meaningful learning companion

ALEKS Notebook Prompts & Strategies

Each of the following strategies includes:

A description of the activity
An example
Sentence starters

Helpful tips

How to Use This Guide

This guide offers quick, practical strategies to help students use their ALEKS Notebooks with purpose. Each section includes a description, example, sentence starters, and tips. Start small—choose one or two ideas to try—and watch your students take greater ownership of their learning.







Notebook Review Questions: Driving Reflection and Efficiency

Reviewing ALEKS Notebooks with students isn't just about checking work—
it's an opportunity to deepen understanding, connect to standards, and build
students' ability to think critically about their process. When you take a few
minutes to ask targeted questions, you help students reflect on their
strategies, evaluate efficiency, and make stronger choices moving forward.

Try these conversation starters during notebook reviews:

Why did you do that?

Were there other methods you could have used? Which might be the most efficient? What would you do differently next time?

Can you flip back to that problem and see how you solved it?

What's the most efficient way to solve this problem? Why?

Make a prediction about what comes next based on what you've learned so far.

Join the Conversation!

Looking for more ideas, resources, and real-world classroom tips? Join the <u>ALEKS</u>

<u>Educator Community</u> to connect with teachers across the country. Share strategies, ask questions, and discover new ways to help students use their notebooks efficiently and effectively—while staying aligned to standards.







Write Out Solutions & Error Analysis

Write Out Solutions

Encourage students to go beyond final answers. Writing out each step in the problem-solving process—along with notes explaining why they made certain moves—builds stronger conceptual understanding.

Example

$$2x = 6$$

$$x = 3$$

I divided both sides by 2 to solve for x

Sentence Starters

- First, I will...
- The next step is to...
- I took this approach because...

Helpful Tips

- Model annotating a solution on the board.
- Encourage students to evaluate their process's efficiency.
- Link their strategies to standards that emphasize mathematical communication and reasoning.

Error Analysis

Mistakes are a goldmine for learning. Students identify where an error occurred, explain why it happened, evaluate whether a more efficient method could have been used, and walk through the correct approach

Example

Incorrect answer: Correct answer:

$$3x + 4 = 10$$

$$3x + 4 = 10$$

$$3x = 14$$

$$3x = 6$$

$$x=2$$

I incorrectly added 4 and 10 in the isolation step for 3x. To correct this, I need to subtract 4 from both sides to isolate 3x correctly.

Sentence Starters

- The mistake I made was...
- This happened because I...
- The correct approach should be...

Helpful Tips

- Make "Favorite Mistake" a weekly routine.
- Celebrate thoughtful corrections as part of a growth mindset.



Level Up Learning with the



ALEKS Notebook

Visual Aids & Mini Lessons or Personal Tutorial Videos

Visual Aids

Encourage students to sketch concepts using graphs, charts, diagrams, or flowcharts. Visual representations build memory and clarity—especially for abstract ideas.

Example



A concept map showing steps for solving linear equations:
Isolate variable → Combine like terms → Solve → Check work.

Sentence Starters

- This figure represents...
- The graph helps me understand...
- This flowchart shows...

Helpful Tips

- Let students create anchor charts or notebook "toolkits."
- Offer drawing templates or graphic organizers

Mini Lessons or Personal Tutorial Videos

Students record important notes from teacher instruction, ALEKS explanation pages, or video tutorials—capturing examples, tips, and hints that help them remember key concepts.

Example

To find the area of a rectangle, use this formula. area = width x height

Hint: Use FOIL (= first, outer, inner, last) to expand brackets.

Sentence Starters

- The teacher emphasized that...
- A helpful tip I learned was...
- An example problem we covered was...

Helpful Tips

- Create a class "Greatest Hits" page of goto tips and formulas.
- Let students teach each other using their own mini-lesson notes.





Learning Logs & Goal Setting

Learning Logs

Students summarize what they've learned and reflect on how they learned it. They note challenges, breakthroughs, and plan next steps.

Example

This week, solving systems by substitution was tricky. Watching the ALEKS video helped me slow down and spot my mistakes. Next week, I'll show all my steps and make a checklist

Sentence Starters

- This week, I learned about...
- I found ____ really helpful because...
- I need to spend more time on...

Helpful Tips

- Set aside 5 minutes weekly for logging.
- Keep a class log as a model or reference

Goal Setting

Goal setting boosts motivation and clarity. Whether it's learning 5 new topics or improving accuracy, students write and track short- or long-term goals.

Example

My goal this week is to learn 5 new topics in the Radicals slice by finding the most efficient problem-solving strategies for each.

Sentence Starters

- My goal for [time frame]
- To reach my goal, I will...
- I'm making progress by...

Helpful Tips

- Use ALEKS's Progress Goal Tracker for easy tracking.
- Revisit goals weekly during advisory or math class.





Reflection Prompts & Real-World Connections

Reflection Prompts

Reflection helps students process their learning—what clicked, what was tricky, and what they'll try next. Use these after quizzes, Knowledge Checks, or practice sessions.

Example

"I felt confident simplifying algebraic expressions. I struggled with factoring and forgot to set the equation to zero. I need to review factoring steps..."

Sentence Starters

- I did well on...
- I struggled with...
- A question I still have is...
- A more efficient way I could have solved this problem is...

Helpful Tips

- Use exit tickets with reflection prompts.
- Encourage honesty mistakes are part of the process!

Real-World Connections

Students connect what they're learning in ALEKS to real-life scenarios or careers. This helps answer the classic "When will I ever use this?" question.

Example

Architects use geometry to design safe buildings.
They calculate angles, areas, and volumes to make sure structures are stable

Sentence Starters

- This math concept is used in...
- A job that uses this concept is...
- In the real world, this helps with...

Helpful Tips

- Highlight how professionals choose the most efficient method for solving real-world problems, connecting to application standards.
- Tie concepts to student interests—sports stats, gaming, design, etc.

Final Thought

The ALEKS Notebook isn't just a log of equations—it's a launchpad for student agency. When used with intention, it becomes a reflection space, a goal-tracker, a resource guide, and a learning diary all rolled into one. Start small, celebrate growth, and watch your students take the wheel on their learning journey.