

# PLATO® Secondary Mathematics and Science Solutions



- Access rigorous academic content that helps prepare students for high-stakes exams

Build a scientifically research-based supplemental curriculum

Improve students' math and science skills in preparation for post-secondary education and high-tech jobs

Promote continuous improvement through explicit professional development

Increase comprehension with explorations, simulations, experiments, and video

# Prepare students for success in college and high-tech careers.

Accelerate your students' mathematics and science skills and prepare them for success in college and high-tech careers. Teachers can target instruction toward each student's academic needs with:

- Pre- and post-assessments that identify individual skill levels.
- Professional development in analyzing student data and differentiating instruction.
- Rigorous, age-appropriate supplemental curricula that address basic foundational skills through advanced concepts and investigations.
- Spiraling, reinforced content that advances to match students' advancing skills.

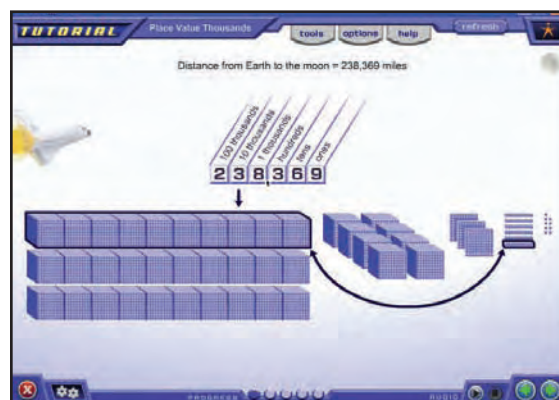
## PLATO® Secondary Mathematics

PLATO Secondary Mathematics curricula are designed according to NCTM guidelines. This gives your mathematics classrooms access to pedagogically sound, supplemental resources that:

- Allow students to observe tutors modeling strategies and concepts.
- Ask students to apply critical math concepts independently through practice, exploration, and reflection.
- Deliver investigations activities in which students apply learned strategies in interactive, advanced scenarios for enrichment.
- Supply notebooks, calculators, and graphics tools within each lesson to support learners.

Using pre-assessment results and self-paced content, PLATO Secondary Mathematics curricula prescribe individual learning paths for each student. This maximizes instructional time, allowing teachers to focus on the skills students need to master to meet state mathematics standards and achieve success on high-stakes exams. Within our curricula, teachers will have access to instruction across skill levels K–12 and across content areas including:

- Algebra
- Geometry and Measurement
- Math Problem Solving
- Remedial mathematics for students at skill levels K–8
- Foundational mathematics concepts



A lesson on parallel lines and their slopes from PLATO® Foundational Mathematics.



## PLATO® Secondary Science

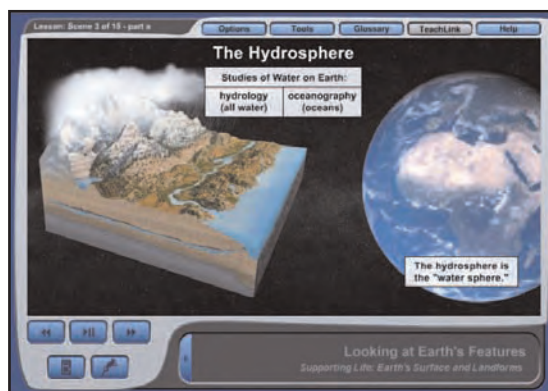
Bring abstract science concepts to life with our engaging, rich science instruction that features multimedia lessons, animation, video, and audio. With the most comprehensive offerings for 7–12 science instruction, PLATO Secondary Science curricula include lessons from life science to chemistry that will help prepare your students to perform against more stringent science standards and high-stakes exams. Use our secondary science solutions to supplement your existing instruction by:

- Engaging students in scientific inquiry, problem solving, and critical thinking with our fun, theme-based lessons.
- Enriching hands-on learning and deepened student understanding of abstract concepts with simulations, experiments, and investigations.
- Building student confidence when using scientific terms with our narrated glossaries.
- Supporting struggling readers, ELLs, and students with special needs with our optional read-along feature.

Our offerings provide age-appropriate content that spans content areas including:

- Life Science
- Earth and Space Science
- Physical Science
- Chemistry
- Biology

By providing a sophisticated test item bank with our science content, we allow teachers to easily create and assign objective-based pre- and post-tests to determine student's level of understanding and prescribe appropriate instruction.



*A lesson on the Earth's features in PLATO® Earth and Space Science.*

### Lab Add-on

Reduce consumable costs and risks associated with operating science labs in schools and increase student access to experiments with our multiple lab simulations. Teachers can assign technology-based dissections and chemistry and physical science lab experiments, expanding students' abilities to investigate complex science concepts.



## Implementation Options

With built-in flexibility and the expertise of PLATO® Professional Services, you can implement PLATO® Secondary Mathematics and Science Solutions to meet your instructional needs and improve student achievement. Other schools have seen success in these models:

### Whole-Class Instruction

Many teachers have found success using PLATO Secondary Mathematics and Science Solutions to support whole-class instruction, whether it supplements lectures during independent practice or brings complex science and math concepts to life during presentations.

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*“With the help of PLATO Chemistry, an LCD Projector, and my desktop computer, topics like the movement of the modern day atom come to life. The students look in amazement as the colored subatomic particles zip across the screen.*

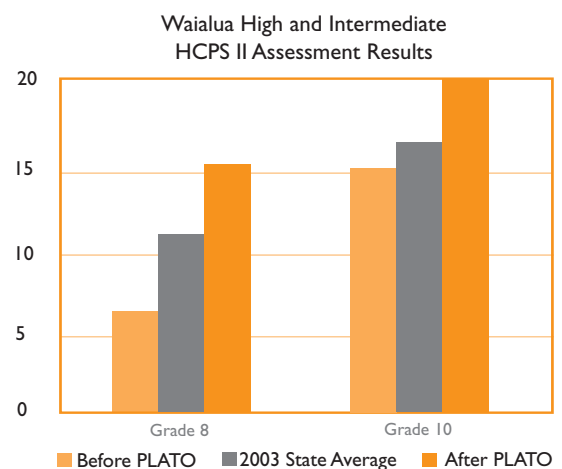
*I no longer have to ask them to ‘pretend’ to visualize the concept—they actually get to see it.”*

—Joshua Denhart, Valley High School, IA

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### Preparation for High-Stakes Exams

PLATO Mathematics and Science curricula are aligned to state standards and can be used to support textbook lessons. Teachers use the test item bank to deliver standards-based pre- and post-tests to ensure students are progressing towards standards mastery and are prepared for end-of-year exams.



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*“I believe that PLATO Learning’s mathematics curriculum has impacted the students for the better. They seem more confident in their lessons, as well as in their overall math skills. PLATO Learning software has been a tool for me to better educate the students I have.”*

—Sterling Carvalho,  
Waialua High and Intermediate Schools, Hawaii

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## Remediation

New school reform programs are targeted toward students at-risk of failing math and science courses or dropping out of school because they lack basic skills. PLATO Mathematics and Science Solutions deliver mathematics and science instruction in a self-paced environment, allowing students to progress at their own rate. Instructional time and practice opportunities are increased when course work is offered in after-school programs or at home through distance learning.

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“Because of the e-learning aspect of our credit recovery program, it also seems that students have changed their attitudes toward credit recovery. They realize that credit recovery is not all worksheets, repetition, and drudgery; it also means relearning the standards in engaging and interesting formats with lots of visuals and graphics”

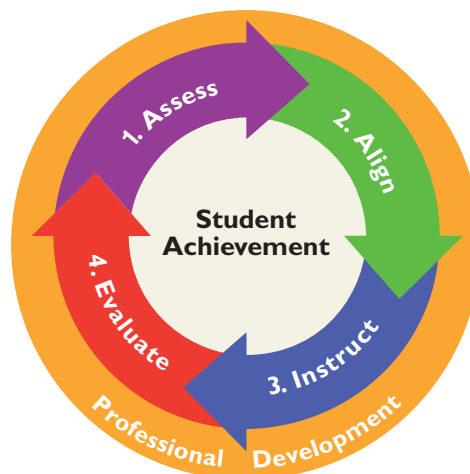
—Steve Johnson, Castle Park, CA

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## Supporting Research-Based Mathematics and Science Instruction

Through PLATO Learning’s comprehensive professional development, we will help you promote continuous improvement, ensuring all implementation strategies are tightly aligned with your student achievement goals. Following the PLATO® Student Achievement Model, our Professional Services team will help you:

- assess individual student needs;
- align and prioritize learning objectives;
- allocate resources and strategies for instruction to reach measurable achievement goals; and
- evaluate your program to guide improvement efforts and document success.



## Funding Math and Science Partnerships

The federal Math and Science Partnerships program aims to help schools and districts develop rigorous math and science curriculum, offer math and science distance learning opportunities, and raise student achievement by improving math and science skills, especially for students at risk of dropping out of school. PLATO Secondary Mathematics and Science Solutions can help you provide appropriate research-based instruction for these students using our award-winning curricula.

Accelerate your students' mathematics and science skills with PLATO Secondary Mathematics and Science Solutions.

Learn more by calling 800.44.PLATO or visiting [www.plato.com/mathandscience](http://www.plato.com/mathandscience).

Real learning. Real results.™