



CONTENT KNOWLEDGE AND FOCUS AREAS IN SUMMIT LEARNING

WHY DO STUDENTS USE INDIVIDUALIZED PATHWAYS TO MASTER CONTENT KNOWLEDGE?

Part of what makes Summit Learning unique is that students have choice in how and when they learn **Content Knowledge**. By offering different types of learning resources and significant choice in learning pathways, students become self-directed learners who are able to understand not just *what* they are learning, but also *how* they are learning.

Through **Focus Areas** that include learning objectives, **Content Playlists** of resources, and **assessments**, students have access to their entire year's content and move through that content not at a set pace, but when they have demonstrated mastery. Teachers in Summit Learning can see exactly where each and every one of their students are in their learning.

As a result, they can use that information to tailor instruction to meet the needs of all students. Teachers can identify when they should provide additional support to a small group or individual and when whole-group instruction is necessary.

Students will demonstrate competency on standards-aligned Content Knowledge across all core subject areas by the end of the year. Each student has a mentor to help them set weekly goals toward content mastery, reflect on progress to develop **Habits of Success**, and understand how those goals relate to their long-term goals for college and career.

Finally, in order to put their content knowledge to use, students take what they learn and apply it to the real world via **Projects**. This is where teachers and students spend the majority of their class time.

HOW DO SUMMIT LEARNING STUDENTS LEARN CONTENT KNOWLEDGE?

The Summit Learning Platform includes access to standards-aligned, foundational resources to teach Content Knowledge in each subject, which can be adapted by Summit Learning teachers for their own students.

A STUDENT'S YEAR VIEW IN THE SUMMIT LEARNING PLATFORM

The screenshot shows the Summit Learning Platform interface for a student's year view. The top navigation bar includes 'SUMMIT' and 'Year'. The left sidebar has options for 'Week', 'Year', 'Progress', and 'College'. The main content area is a calendar grid from August to September, divided into three subject sections: English, History, and Science. Each section has three rows: 'PROJECTS', 'POWER', and 'ADDITIONAL'. The 'Astronomy 1' project is highlighted in red in the English section. A blue vertical line indicates the current date in October. Red callout boxes at the bottom identify 'Projects' and 'Focus Areas'.

Projects

Focus Areas

Students can see at a glance in the Summit Learning Platform whether they are on track for all projects and playlists in their courses.

The content is divided into Focus Areas across grade spans, aligned to the Common Core Standards and the Next Generation Science Standards. Students progress through the Focus Areas contained on the Summit Learning Platform at their own pace during blocks of time in the schedule, called **Personalized Learning Time**, set aside for self-directed learning. Each Focus Area is aligned to a Project where students apply their Content Knowledge and develop **Cognitive Skills**.

COMPONENTS OF A FOCUS AREA

Atomic Structure

You've mastered this area with a 9/10.

Diagnostic Assessments

Diagnostic [Start](#)

Learning Objectives

Focus Area Info

DESCRIPTION

By the time you finish this playlist, you should be able to...

- 1) Identify the three subatomic particles and their location within the atom
- 2) Determine the atomic mass and # of protons, neutrons, and electrons in any atom using nuclear notation and the periodic table
- 3) Determine the identity of any atom based on its subatomic particles
- 4) Describe the experiments that led to our current model of the atom

KEY TERMS

Define and give an example of the following terms:
Atom, Proton, Neutron, Electron, Nucleus, Atomic Mass, AMU, Atomic Number, Isotope

SCORE NEEDED TO PASS
8 out of 10 correct.

PROJECTS

Chemical Reactions Investigation

Project that applies this content

Playlists

OBJECTIVE 1
2/2 Identify and describe the subatomic particles that make up an atom.

- Video: Objective 1 Overview
- Video: Basic Atomic Structure — A Look Inside the Atom
Identify the nucleus and electron cloud of an atom.
- Video: Particles of an Atom
- Video: Just How Small is an Atom?
- Reading: Subatomic Particles
- Website: Models of the Atom
- Check for Understanding: Atomic Structure
- Check for Understanding: Subatomic Particles (Braingenie)
Think you got it? Try some practice questions to see if you understand.

OBJECTIVE 2
1/2 Interpret atomic mass and nuclear notation to determine the subatomic components of a given element.

OBJECTIVE 3
3/3 Use information about the subatomic components of an atom to identify elements.

OBJECTIVE 4
3/3 Describe how our understanding of atomic structure has changed over time.

Students Able to Help [View All](#)

- John Einstein [Send Thanks](#)
- Crystal Ocampo [Send Thanks](#)
- Chien Li I'd like to help!

Content Assessment

9/10 Content Assessment [See All Takes](#) [Request](#)

For each Focus Area, students have access to learning objectives, a diagnostic assessment, a Content Playlist that contains different types of learning materials (primary sources, videos, presentations, text, etc.), and a Content Assessment.

Students review the learning objectives in the Summit Learning Platform, choose which resources on the Content Playlist to use to learn content based on how they learn best, and determine when they are ready to check their mastery by taking the Content Assessments. When a student is ready, they can request to take the Content Assessment which a teacher can then approve.

Instead of high stakes pass/fail tests, the Content Assessments are designed to promote a growth mindset and can be taken multiple times until students demonstrate mastery. Teachers and mentors guide students in preparing for Content Assessments to ensure they are practicing good study habits. Content Assessments are graded in the Platform, so teachers, students, and parents have immediate access to the results. Teachers can use this information to easily identify which students need help on specific Focus Areas and provide additional scaffolding.

TEACHER VIEW OF STUDENT INFORMATION FOR A FOCUS AREA

Chemistry Atomic Structure ▾ All Sections ▾

Overview Students Assessments Goals

<input type="text" value="Search Students"/>								Export
Students (99)	↑ Date Taken	Score	Identify...	Interpret...	Use informa...	Describe...		
		78 passed	62 passed	71 passed	61 passed	43 passed		
Crystal Ocampo	Aug 18 at 10 AM	9/10 2	2/2	1/2	3/3	3/3	See All Attempts	
John Einstein	Aug 18 at 1 PM	9/10 2	2/2	2/2	3/3	2/3	See All Attempts	
Anna K. Johnson	Aug 18 at 1 PM	8/10 3	2/2	1/2	2/3	3/3	See All Attempts	
Blaise White	Aug 23 at 2 PM	9/10 1	2/2	2/2	3/3	2/3	See All Attempts	
Katrina Herschel	Sep 1 at 12 PM	9/10 2	1/2	2/2	3/3	3/3	See All Attempts	
Cecilia Brett	Sep 8 at 10 AM	8/10 1	2/2	2/2	2/3	2/3	See All Attempts	
Chien Li	Sep 8 at 12 PM	9/10 1	2/2	2/2	3/3	2/3	See All Attempts	
Dorothy Friedman	Sep 8 at 12 PM	10/10 1	2/2	2/2	3/3	3/3	See All Attempts	

For each Focus Area, the teacher can view the date and score of the most recent Content Assessment and number of times the student has attempted the Content Assessment. Teachers are easily able to identify which students have made multiple attempts and may need additional instruction.

Score and Number of Attempts

Teachers can easily see which specific learning objective within a Focus Area a student hasn't mastered, allowing them to provide targeted support to an individual or small group on the specific content.

After mastering required **Power Focus Areas**, students can deepen understanding with **Additional** and **Challenge Focus Areas** or offer help to their peers. This structure enables all students to master the most important Content Knowledge while creating differentiation for students who want additional challenge or are passionate about a specific topic and want to explore it deeply.

MATH COURSES

Summit Learning approaches math differently from other subjects due to the nature of the discipline. The Common Core math standards and the National Council for Teachers of Mathematics advocate students make sense of new mathematics content by problem-solving before practicing for fluency. Aligned to this approach, in Summit Learning, students' initial learning of most math content is through problem solving in **Concept Units** and then practicing it for fluency in Focus Areas.

KEY CONCEPTS

Assessment	A 10-question multiple choice test for each Focus Area in the Summit Learning Platform. Teachers, students, and parents can always see which content has been mastered and where additional support is needed. Students take a diagnostic assessment at the start of each Focus Area and may retake Content Assessments until they achieve mastery.
Additional Focus Areas	Content that students complete after they have completed a Power Focus Area. These are not required to pass a course, but they make up 9% of a student's grade, so they are highly encouraged.
Challenge Focus Areas	Additional content that enables students to further explore a subject matter after they have completed Power and Additional Focus Areas. They are not required and do not count towards a student's grade. Only a few courses include Challenge Focus Areas.
Cognitive Skills	Interdisciplinary, higher order skills — such as collaboration, communication, and critical thinking — needed for college and career success. In Summit Learning, Cognitive Skills represent 70% of a student's grade.
Content Knowledge	The ideas, vocabulary, and concepts for an academic subject. In Summit Learning, mastering Content Knowledge is 30% of a student's grade.
Content Playlists	Learning resources (primary sources, videos, presentations, text, etc.) for each Focus Area on the Summit Learning Platform that enable students to have choice in how they acquire Content Knowledge.
Focus Areas	A unit of content that includes learning objectives, a diagnostic Assessment, a Content Playlist, and a Content Assessment in the Summit Learning Platform.
Habits of Success	The social and emotional skills that enable students to be successful at both academic and non-academic pursuits. These include the skills to become a self-directed learner.
Math Concept Unit	The collection of math tasks that leads to students learning key concepts before they begin working on their Focus Areas.
Personalized Learning Time	Students spend one-third of their academic week working on Focus Areas in the Summit Learning Platform to gain Content Knowledge. During this time, teachers are providing additional support to small groups or individuals or checking in with mentees' progress.
Power Focus Area	Core content that every student needs to learn to demonstrate mastery. Students must pass all Power Focus Areas to pass a course. Power Focus Areas make up 21% of student's grade.
Projects	Students apply the Content Knowledge they're learning to solve real-world problems in teams and develop the Cognitive Skills needed for college and career success.



TO UNDERSTAND
MORE ABOUT THE
LEARNING SCIENCE
BEHIND THESE CONCEPTS,
READ THE SCIENCE OF
SUMMIT WHITEPAPER.