AZTEC SOFTWARE

WHITE PAPER

Aztec Software Sets the Bar High for The Digital Learning Environment

3 MILLION STUDENTS EDUCATED BY AZTEC IN THE LAST 35 YEARS

INTRODUCTION

Founded in 1980 by educators, not technologists, Aztec Software has been in the business of improving adult and young adult lives through computerized skills remediation from its inception. With an industry-leading understanding of the way in which its student population learns using a computer, the company has expanded its product set beyond academic material and into all aspects of the transitioning worker's retraining and survival.

To date, the impact of the Aztec Learning System has prepared students for higher levels of education, improved job performance, provided alternative means of education for adults and non-traditional students, and ultimately helped people realize their potential and meet their educational goals.

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EXECUTIVE SUMMARY

No two students learn the same. And 21st century learning carries some challenges, but also opportunities. Diverse student populations and increased student expectations demand different educational solutions to shape students' 21st century skills. Aztec Software gives the education community an opportunity to meet those challenges effectively by creating individual learning plans designed to focus on each student's specific needs so educators can provide supportive, productive and portable skills for work and continuing education.

The software prepares students for higher levels of education, improves job performance, provides alternative means of education for adults and non-traditional students, and ultimately helps people realize their potential and meet their educational goals. The Aztec Learning System uses LIFE SKILLS scenarios to generate an individual education plan designed to focus on each student's needs.

Aztec's complete learning series teaches basic education using work and real-life examples, giving the students 21st century tools to use for future employment. The multisensory approach of audio, graphics, and interactive screen design reinforces and enhances learning. The courseware design enhances academics, prepares individuals for reentry, and provides work readiness skills. Meaningful application while using the computer as an interactive mode of learning makes the learning more interesting and memorable.

Aztec Software is a standards-based learning system that has been proven to aid in higher high school equivalency scores – higher than the national average – and is designed for every student's need: assisting adult learners with assessing and remediating their learning needs, preparing students for success with standardized tests, and preparing students for college entrance exams and helping them bypass noncredit developmental studies, and providing a solid foundation of academics in addition to the explicit 21st century skills essential to compete in today's workforce.

Who Uses Aztec?

Aztec Software assists adult learners with assessing and remediating their learning needs. Aztec's focus is to help identify a learner's deficiencies, remediate those deficiencies, and prepare the learner with the life skills essential for his/her post-secondary experience. Aztec's standards-based digital learning series is well-suited for every educational facility that helps adult learners build skills for a productive future - academic institutions, community colleges, adult education and workforce facilities, and correctional institutions and prison re-entry centers.

The potential and the power of digital learning to improve student achievement and graduation rates for adult learners is significant, and increasingly necessary to make sure students of all levels of the

learning spectrum have access to the tools needed to thrive in the 21st century. Digital learning has been proven to:

- Improve knowledge retention
- Provide prescriptive feedback for students
- Increase student motivation through engaging content
- Allow students to learn on their own time, when they learn best
- Create a portable learning opportunity – anytime, anywhere
- Facilitate shared work experience with instructors
- Offer up-to-date, effective, and relevant content
- Deliver instant reports and feedback systems
- Support individualized, custom learning by level and series
- Let students progress at their own rate without pressure and time constraint

NRS-CCR-TABE-CASAS - AZTEC SOFTWARE SERIES								
Grade Level	**CCSS Level (A - E)**	**CCR Level (A - E)**	**NRS ABE Level**	**Other NRS Designation**	**NRS Educational Functioning (EFL) Level Name**	**CASAS ABE Level**	**TABE 9&10 Level**	***Aztec Software Series***
K-1	A	A	1	ABE I	Beginning ABE Literacy	A	L	
2-3	B	B	2	ABE II	Beginning Basic Education	B	E	***Foundations Series***
4-5	C	C	3	ABE III	Low Intermediate Basic Education	B	M	
6-8	D	D	4	ABE IV	High Intermediate Basic Education	C	D	***The Bridge Series***
9-10	E	E	5	ASE I	Low Adult Secondary Education	D	A	***GED Prep Series HiSET Prep Series TASC Prep Series***
11-12	E	E	6	ASE II	High Adult Secondary Education	E	A	

The Aztec Result

For more than three decades, Aztec Software has been improving the lives of adult learners by strengthening their academic foundation skills. Using the Aztec Learning System, the Aztec student receives a customized learning plan designed to maximize their educational gains in the most time efficient manner possible.

Aztec's diverse team of education, business, and technology professionals is enthusiastically committed to providing relevant, timely, and thorough digital curriculum opportunities for all students with

successful results in mind. This paper presents the Aztec Software System and its role in the 21st century learning environments - adult basic education, high school equivalency, college ready and work ready programs – through case studies, student and educator testimonials, and learning models. One such case study in Oakwood, Georgia showed a significant correlation between Aztec Software assessments and higher GED Ready scores:

Community College Case Study

Lanier Technical Community College is one of the top technical colleges in Georgia. In fact, it was named 2014 TCSG Technical College of the Year. LTC has an impressive Adult Education program specifically designed for adults who have different needs, backgrounds, and skills, and they use Aztec Software System as an integral part of their GED test preparation curriculum. In the summer of 2014, Aztec asked Lanier Technical Community College to share their results from students using Aztec to study for the GED tests. The results of 8 individuals taking 10 tests were extremely significant. As individual performance on the Aztec GED Practice Test improves, the expectation is that the subsequent GED Ready score will improve as well. During the study, those individuals that increased their Aztec score by 10 percentage points, for example, also increased their GED Ready score by 6.6, roughly 7, percentage points. Aztec Software System assessments line up well with the GED Ready test parameters, and the results from the LTC pilot study provide a good proxy for how an individual may perform on the GED Ready test.

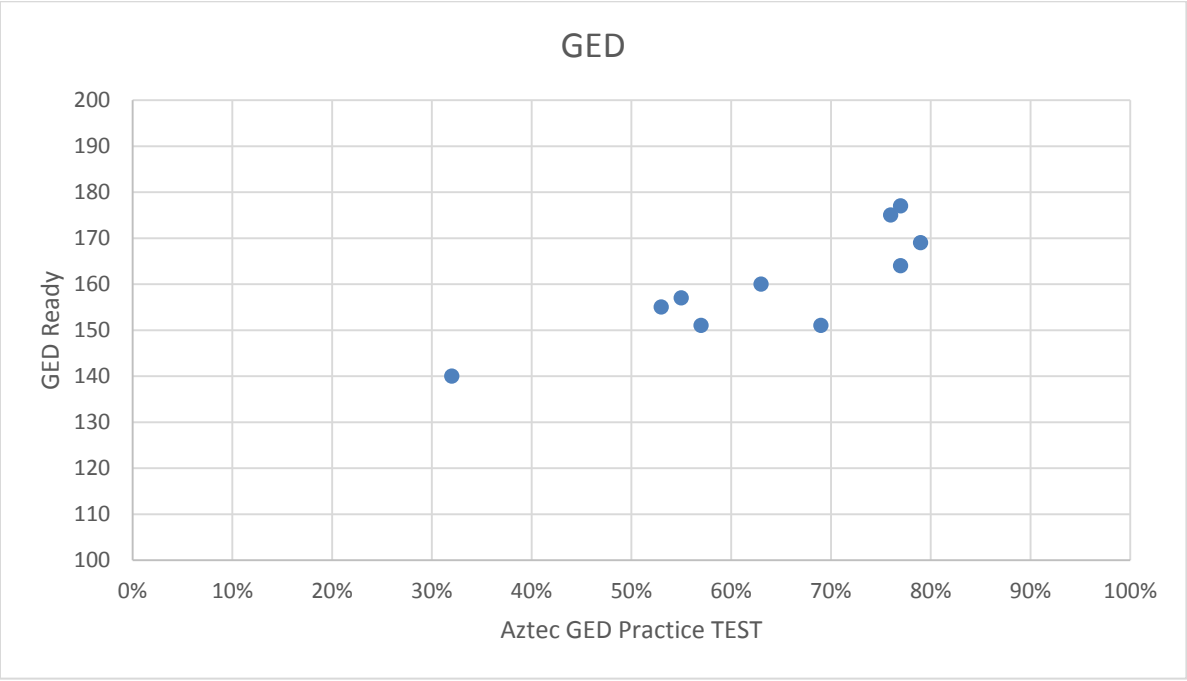


Figure 1: GED Ready Test Trend
Lanier Technical Community College Aztec pilot results. As individual performance on the Aztec GED Practice Test improves, the expectation is that the subsequent GED Ready score will improve as well.

GED Testing Service Case Study

Another case study by the GED Testing Service, which ran from January 1, 2014 to March 24, 2015, indicates that students who use the Aztec Software system as part of their study plan surpass the national average pass rates, ranking among the top 5 in all four areas of study – Math, RLA, Science, and Social Studies.

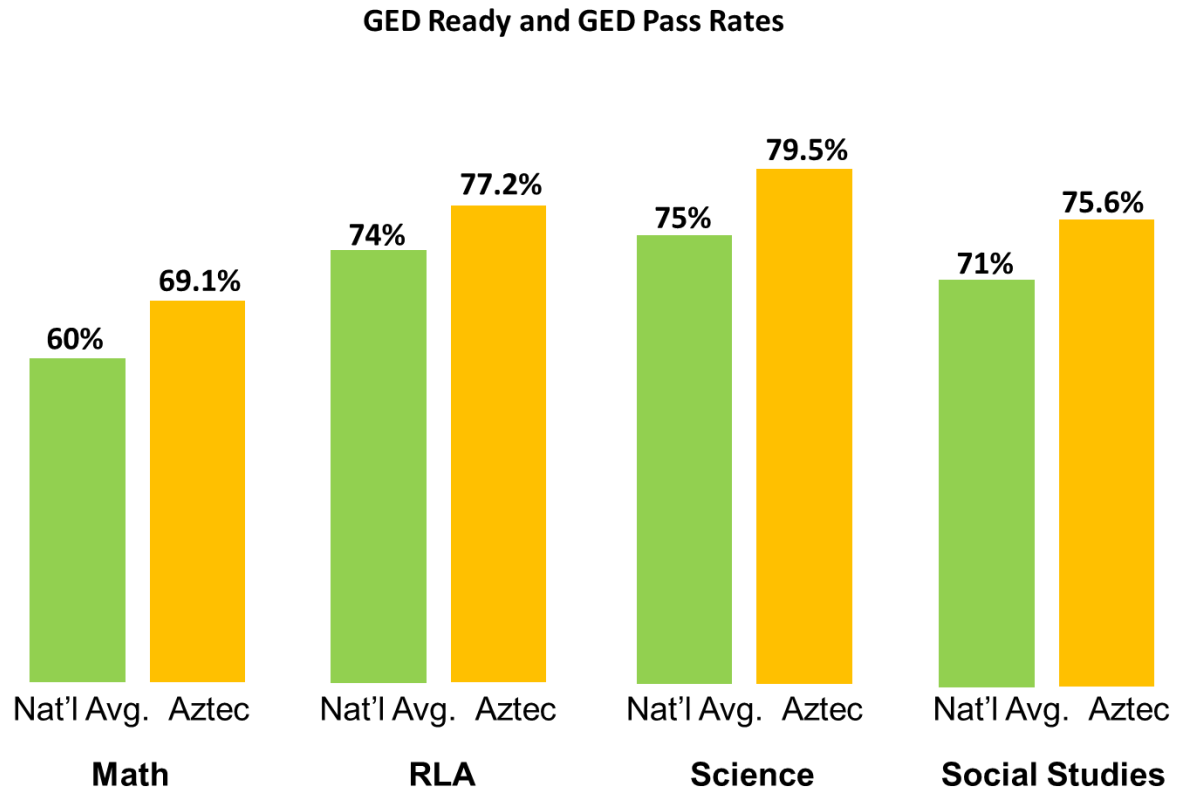
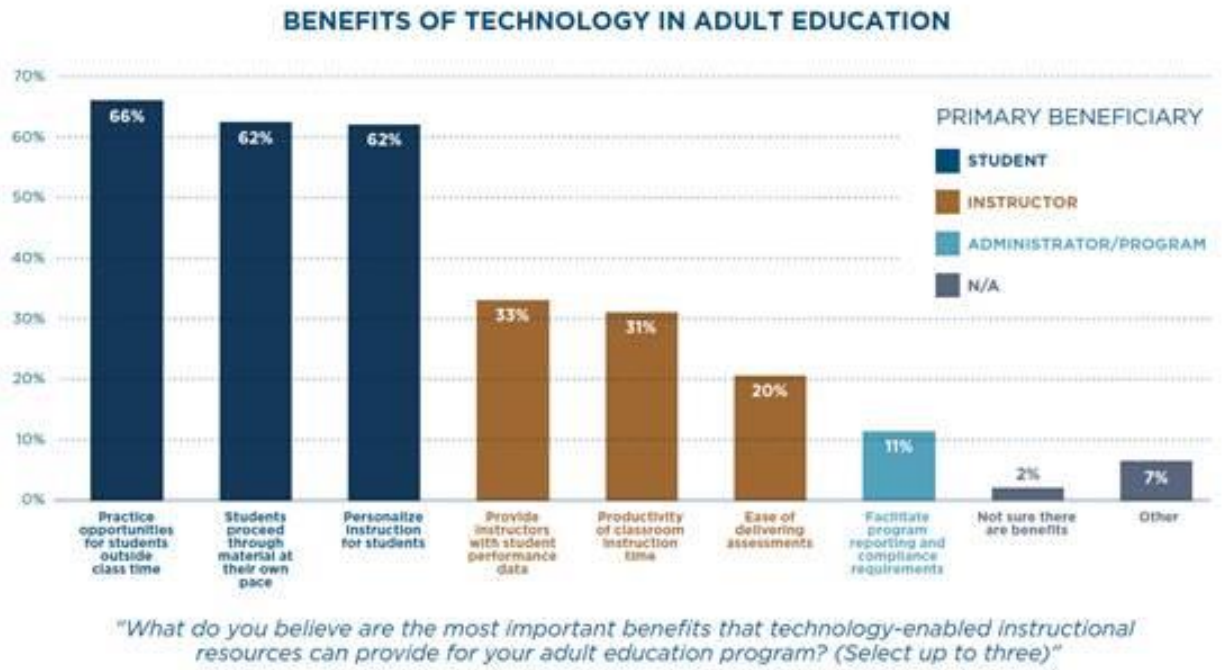


Figure 2: GED Ready and GED Pass rates using Aztec compared to the national average pass rates.

The 21st Century Approach to Digital Learning

In today's competitive global economy, the pace at which education is being delivered to students, young and old, is increasing at an unprecedented rate. Consequently, the demands that are placed on our educators are requiring them to teach to more rigid standards. As the classes move faster and cover more ground, struggling students often find themselves further behind.

Striving to provide the highest quality educational solutions designed with the student in mind is only one part of the Aztec mantra. The Aztec Learning System allows every student the opportunity to feel empowered by his or her education and future.

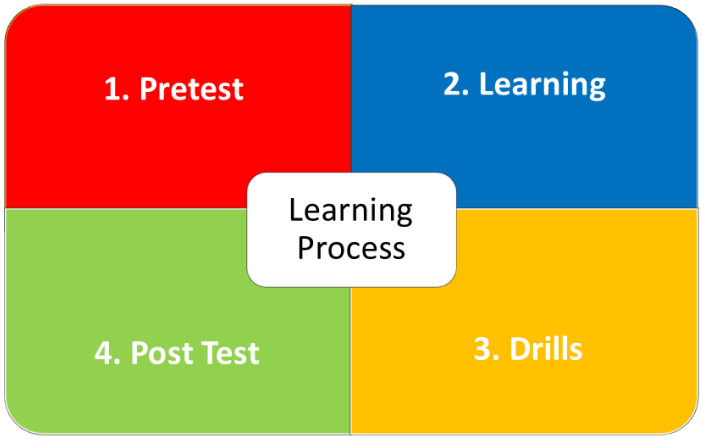


The Aztec Teaching Methodology

The Aztec teaching methodology is based on 30 plus years of developing educational software solutions. All of our lessons are developed in-house with a consistency of learning, filled with interactive screens and just the right amount of text/graphics on a page to keep the student engaged in learning.

Aztec's learning process is four part: Diagnose, Remediate, Reinforce, and Confirm.

1. **Diagnose**
2. **Remediate**
3. **Reinforce**
4. **Confirm**



Diagnose:
Subject-based pretests give learners and teachers an opportunity to focus on specific needs.

Remediate:
Personalized instruction will only teach content areas that are needed for GED success.

Reinforce:
Each concept has a pool of questions that strengthen the skills with practice through drills.

Confirm:
Each concept has a pool of questions that strengthen the skills with practice through post-tests.

The Aztec Curriculum

Career and College Readiness Standards

In April of 2013, the U.S. Department of Education, Office of Vocational and Adult Education, released a set of standards called the "Career and College Readiness Standards for Adult Education." Standards-based education has been gaining momentum because it allows educators to understand where to focus their efforts and results in clearer expectations for students. In an effort to promote a stronger link among adult education, postsecondary education, and the world of work, the OVAE chose to start with the Common Core State Standards, adopted by 46 states, as the basis for review and recommendations for a set of standards for adult education. The CCSS focus on developing critical thinking skills so closely linked to being able to get the training needed to earn a living wage in high-growth industries. The standards are ambitious and robust and are intended to provide all adults with the opportunity to be

prepared for post-secondary training without remediation. For these reasons, Aztec Software chose to use the College and Career Readiness Standards as the basis of their curriculum and instruction.

Since the three high school equivalency tests are all based on Career and College Readiness Standards, Aztec Software's instruction at all levels builds to provide the skills and knowledge required to pass those tests at honors or very high levels. By offering three sequential Series that build to the high school equivalency prep goal, learners work through CCR math, reading, writing, and reasoning skills from the most basic levels or from wherever their skills leave off.

Correlations to the Career and College Readiness Standards for Adult Education and Aztec Software from grade levels 2-12 are available upon request. To make reporting NRS data as easy as possible, the Aztec correlations also provide alignments to TABE from levels E-A. Teachers can readily use TABE scores to know which Series students need. It is important to note that Aztec curriculum for CCR standards has been developed since 2013. This was an essential and very significant step given the nature of the standards, their focus on reasoning skills, and their requirement that even students at the lowest academic levels should formulate their understanding of algebraic and geometric concepts, of critical reading, and of analytical writing.

The GED Testing Service has begun a certification process through which they will review the curriculum of all publishers interested in being certified as approved instruction for GED prep. Aztec volunteered to be first in the review and is well into the process. Results are expected to be announced in the Fall. Preliminary reports reveal Aztec students to be scoring from 5-9 points higher than the national average on GED tests.

Aztec FOUNDATIONS SERIES: TABE Levels E and M

The Foundations program contains an evidence-based reading curriculum designed to improve adults' fluency and comprehension. Developed for adults reading at or below a fifth grade level, Foundations is unique in the following ways:

Rooted in Research

The Foundations program is rooted in research. All lessons were developed using practices that have been proven to improve reading. The Foundations program targets four key areas of reading, including fluency, comprehension, vocabulary, and phonics (e.g., National Reading Panel, 2000; Roberts, Torgesen, Boardman, & Scammacca, 2008; Rashotte & Torgesen, 1985; Seok & DaCosta, 2014).

Aligned to TABE and Common Core Standards

The Foundations program is aligned with both TABE and Common Core standards. All lessons reinforce these standards and provide additional preparation for related exams and assessments.

Individualized Programs for All Users

After taking a diagnostic assessment, learners will be provided with a customized plan based on their strengths and weaknesses. Each customized plan will provide a list of lessons to be completed and a rationale for why the lessons were selected. Learners will be able to complete lessons at their own pace. Learners will also be able to refer back to the customized plan at any time for clarification or additional resources. Each lesson is accompanied by a problem set to assess learning.

Aimed at Learners of Varying Learning Levels

Adults struggling with reading OR learning English as a second language will benefit from Foundations. The only prerequisite for the program is that learners know basic sounds and letters. Because Foundations focuses on teaching the underlying rules and patterns in the English language, learners will develop the skills necessary to decode and comprehend difficult text.

For English language learners, Foundations provides lessons on the more difficult parts of the English language, including sight words, silent letters, idioms, and vocabulary. Foundations also provides a comprehensive phonics program to ensure all learners understand the fundamental sound patterns in the English language.

Engaging Material

The Foundations program is unique in that all lessons incorporate stories and articles that will be of interest to an adult population. Examples include stories about sports, music, family, and health. Research has shown that reading engaging texts is important for comprehension and motivation to read (e.g., Schiefele, 1991; Guthrie, Wigfield, & You, 2012).

Aztec BRIDGE Series: Pre HSE and TABE Level D

The Aztec Bridge Series features over 100 lessons in Language Arts and Math. The Series is designed to correlate with College and Career Readiness Standards for Adult Education at levels 6-8, as identified by the U.S. Department of Education, as well as TABE Level D Standards. Students will use this series to bridge from basic academics to high school equivalency curriculum or TABE Level A. Students will practice using academic skills along with critical thinking to solve problems and think analytically. Students will also progress in practical skills such as using reference materials, spending money wisely, and writing persuasively.

Features of the Bridge series include:

- Appropriate sequencing helps students build skills more rapidly.
- Affordable test fees to keep this valuable credential accessible for test-takers, states, and educational programs.
- Numerous ungraded “Skills Checks” in each lesson give students the opportunity to interact as they are learning, and feedback is based on their answers and provides plenty of learning opportunities.

- Drills reinforce learning prior to unit post-testing and give students repeated opportunities to practice new skills.
- Post-testing assures mastery and instills confidence as students progress through each unit

Aztec HIGH SCHOOL EQUIVALENCY SERIES: GED, HiSET, TASC

The Aztec Test Preparation Series has been redesigned in 2014 from the ground up by our team of experts, with over 3 decades of experience in preparing students for success with standardized tests.

GED
Questions are benchmarked against all published competencies. Free and paid practice exams create a remediation pathway with added Common Core Alignment.

- Authorized GED Ready™ Vouchers Reseller
- Preparation materials include: Reasoning through Language Arts, Mathematical Reasoning, Social Studies, Science, and Computer Literacy
- All Item types included
- Comprehensive reports create a highly successful feedback loop enabling detailed instruction on academic deficiencies

HiSET®
Questions are created and vetted by HiSET® mirroring ACTUAL HiSET® Exam and rendered by Aztec's aTEST® system.

- Preparation materials include: Reading, Writing, Mathematics, Social Studies, and bonus Computer Literacy
- All Item types included
- Comprehensive reports create a highly successful feedback loop enabling detailed instruction on academic deficiencies

TASC
Questions are benchmarked against all published competencies. Free and paid practice exams create a remediation pathway with added Common Core Alignment.

- TASC Test publishing partner
- Preparation materials include: Reading, Writing, Mathematics, Science, Social Studies, and bonus Computer Literacy
- All Item types included

- Comprehensive reports create a highly successful feedback loop enabling detailed instruction on academic deficiencies

Aztec COLLEGE READY SERIES: Community College Preparation - ACCUPLACER

ACCUPLACER and many other standardized tests are used to assess whether a student can enter into credit-bearing courses in community college. While states are required to offer enrollment to any student that applies, they are only compensated for those that test out of basic courses. More importantly, for every semester that a student takes non-credit developmental courses, they are 50% more likely to drop out.

Questions are benchmarked against all published competencies. Free and paid practice exams create a remediation pathway.

- Individual pacing in lessons and practice accommodates all learners.
- Immediate feedback with expanded responses in lessons and practice enhances learning.
- Tests and learning include all four subjects: Math, Sentence Skills, Reading Comprehension, and the written Essay.

Aztec COLLEGE READY SERIES: College and University Preparation - ACT

With the cost of a four-year post-secondary education rising, the competition for entrance has gotten exponentially more difficult. Make sure you have absolutely every advantage when applying to college by enrolling in and using Aztec Software's ACT preparation course.

Using Aztec Software's ACT Prep Course allows a student to study not only at their own pace, but in a completely mobile environment if they wish. Your preparation tools should be as flexible as you are.

Questions are benchmarked against all published competencies. FREE and PAID practice exams create a remediation pathway.

- Individual pacing in lessons and practice accommodates all learners.
- Immediate feedback with expanded responses in lessons and practice enhances learning.
- Tests and learning include all four subjects: Math, English, Reading, and Science, as well as the optional Essay.

Aztec WORK READY SERIES: Ready for Work

Employers are demanding soft skills from their 21st century workforce. Soft skills, the personal attributes that enable someone to interact effectively and harmoniously with other people, are rated as the greatest employee training need, according to a recent survey of employers. In fact, 73.7% of those employers feel the attitudinal and behavioral skills, social skills, and job search skills are lacking across all industries. Through interactive modules, progressive lesson content, contextualized lessons, and real-life scenarios, Aztec's Ready for Work soft skill lessons provide a solid foundation of academics in addition to the 21st century skills in these lessons:

- Health and Appearance
- Positive Thinking
- Listening Skills
- Managing Emotions
- Correct Work Behavior
- Relating to Others
- Following Directions
- Effective Speaking
- Decision Making
- Effective Work Techniques
- Time Management
- Working Productively
- Teamwork
- Dealing with Supervisors
- Customer Service
- Reading for Work
- Writing for Work
- Intro to Green Jobs

NRS-CCR-TABE-CASAS - AZTEC SOFTWARE SERIES								
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4-5	C	C	3	ABE III	Low Intermediate Basic Education	B	M	Foundations Series
6-8	D	D	4	ABE IV	High Intermediate Basic Education	C	D	The Bridge Series
9-10	E	E	5	ASE I	Low Adult Secondary Education	D	A	GED Prep Series HiSET Prep Series TASC Prep Series
11-12	E	E	6	ASE II	High Adult Secondary Education	E	A	GED Prep Series HiSET Prep Series TASC Prep Series

The Aztec Difference

Aztec understands the significant opportunity that lies ahead to prepare students from all demographics and walks of life for a productive, empowering future career and life. That's why the Aztec Software digital learning system includes a wide range of learning series, making our software significant for adult education, high school equivalency, college readiness, and workforce training curriculums. Here's a look at some of the benefits of Aztec Software:

- 100% alignment to Common Core State Standards (CCSS).
- Over 100 new curriculum titles that cover test-specific subject areas
- Over 6000 randomized questions for assessments and practice
- Evidence-based reading approach
- Diagnostic and prescriptive approach with individual learning plans
- Specific skills deficiencies
- Targeted, self-paced instruction
- Curriculum enhancing videos
- New lessons on test-taking strategies
- Comprehensive test prep guide books
- Essay creation and submission process with grading rubric
- Immediate feedback and interaction
- Unlimited practice and assessments
- Simplified administrative reporting
- Chat feature for immediate assistance
- Each Aztec Practice Test mirrors the official practice test.
- Provides learner with an indication of readiness: Percentage score towards readiness and CCSS/CCR areas of greatest concentrated need.

Aztec's Impact

Hundreds of academic institutions, community colleges, adult education and workforce facilities, and correctional institutions and prison re-entry centers across the country have used Aztec Software digital learning curriculum. Here's what they're saying:

"Our students have really done well academically using AZTEC as a primary resource. They have said that they like the way information is given and have been really excited that they can continue their learning outside of the classroom; in fact, several students have passed the GED tests with only AZTEC as their resource for review and practice."

Margaret Harris, Director, Programs/Services, KANSEL

"I feel much better prepared for the Accuplacer test after working in the Aztec program. The software showed me where I needed more study and taught me things I should have known but really didn't understand."

Carlos Cabarra, Student, Chicago Illinois

"We use the Aztec College Prep program with students marginally prepared for admission into our credit curriculum. The students love the program and we have had great success in student retention and completion."

Josh Hayes, College of the Mainland

"Our prison population consistently picks the Aztec system to use over the 3 GED programs that we offer. They have been very successful using this GED series."

Willie Lee Thomas, GED Teacher, Dept of Corrections LA

The Aztec program has been very helpful when used in conjunction with the TABE. I don't know what we would do without this educational tool.

Jan Walton, Oklahoma Dept of Corrections

Our adult student population has found the Aztec software program particularly successful due to its relevance and adult content.

Michael Tines, Assist Director Adult Education Workforce Texoma

In all of the years that I have taught basic literacy I have never had a program as successful as the Aztec Basic Literacy Series has been with my students. The program is engaging, easy to use and importantly provides a simple system that enables my staff to track student progress and results.

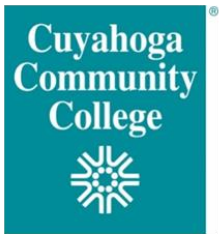
Maria Lopez Callo Director Literacy Program for Texas

No student is like any other in their learning style or educational needs and the Aztec programs provide the flexibility to meet the varied needs of all our students. Thank you for providing us with such comprehensive, easy-to-use and highly effective software through the HiSET Prep and Bridge programs.

Susan Casciano and Sara Gorst, Program Coordinators
Sussex County Community College

Academic Institutions who use the Aztec Software System

Community Colleges who use the Aztec Software System



Adult Ed/Workforce Facilities who use the Aztec Software System

Statewide Deployments and Corrections who use the Aztec Software System

Updated 7/9/14

Aztec's ACT Series

READING

Key Ideas and Details

- Main Idea and Theme Development
- Point of View and Author's Purpose
- Supporting Ideas
- Understanding Relationships
- Drawing Conclusions

Craft and Structure

- The Structure of Texts
- Interpreting Words and Phrases
- Tones in Writing
- Figurative Writing

READING PRACTICE TESTS

ENGLISH

Sentence Skills

- Using All Your Skills in Punctuation
- Using All Your Skills in Basic Grammar
- Using All Your Skills in Sentence Structure
- Using All Your Rhetorical Skills

Purpose, Focus, and Style

- Tones in Writing
- Interpreting Words and Phrases

ENGLISH PRACTICE TESTS

SCIENCE

Science Skills

- Introduction to Scientific Thinking
- Understanding Scientific Terms and Content
- Analyzing Data, Research, and Evidence

Overview of Science Domains

- Overview of Life Science
- Overview of Physical Science
- Overview of Earth and Space Science

SCIENCE PRACTICE TESTS

WRITING

Developing the Essay

- Analyzing Arguments
- The Writing Process
- Elements of the Essay

Sentence Skills

- Using All Your Skills in Punctuation
- Using All Your Skills in Basic Grammar
- Using All Your Skills in Sentence Structure
- Using All Your Rhetorical Skills

WRITTEN ESSAY

MATHEMATICS

Quantitative Problem Solving with Rational Numbers for the ACT

- Numbers
- Number Properties and Forms
- Mathematical Operations
- Math Word Problems
- Unit Rates, and Scaling
- Ratios and Percentages
- Complex Numbers

Quantitative Problem Solving in Geometry for the ACT

- Pythagorean Theorem
- Geometric Properties and Operations
- Composite Figures
- Advanced Geometry
- Transformation, Similarity, and Congruence
- Conic Sections
- Logarithms
- Trigonometry
- Advanced Trigonometry

Quantitative Problem Solving with Data and Statistics for the ACT

- Plots and Graphs
- Range, Mode, Median, Mean
- Probability
- Permutations, Combinations, and Counting
- Series, Sequences and Patterns

Algebraic Problem Solving with Expressions for the ACT

- Exponents and Roots
- Interpreting and Writing Expressions
- Multiplying and Dividing Polynomials
- Factoring Polynomial Expressions

Algebraic Problem Solving with Equations for the ACT

- One Variable Inequalities for the College Series
- Linear Equations
- Solving Quadratic Equations
- Two Variable Linear Equations
- The Unknown Values in Linear Expressions
- Systems of Linear Equations

Algebraic Problem Solving with Graphs and Functions for the ACT

- Graphing on a Coordinate Plane
- Functions for the College Series
- Construct and Compare Models and Functions for the College Series

MATH PRACTICE TESTS

Aztec's Accuplacer Series

READING COMPREHENSION

Reading Comprehension
- Main Idea and Theme Development
- Point of View and Author's Purpose
- Supporting Ideas
- Understanding Relationships
- Drawing Conclusions
- The Structure of Texts

READING PRACTICE TESTS

SENTENCE SKILLS

Sentence Skills
- Using All Your Skills in Punctuation
- Using All Your Skills in Basic Grammar
- Using All Your Skills in Sentence Structure
- Using All Your Rhetorical Skills

SENTENCE SKILLS PRACTICE TESTS

WRITING

Developing the Essay
- Analyzing Arguments
- The Writing Process
- Elements of the Essay

Sentence Skills
- Using All Your Skills in Punctuation
- Using All Your Skills in Basic Grammar
- Using All Your Skills in Sentence Structure
- Using All Your Rhetorical Skills

WRITTEN ESSAY

MATHEMATICS

Quantitative Problem Solving with Rational Numbers for the Accuplacer
- Numbers
- Mathematical Operations
- Math Word Problems
- Unit Rates, and Scaling
- Ratios and Percentages
- Complex Numbers

Quantitative Problem Solving in Geometry for the Accuplacer
- Geometric Properties and Operations
- Conic Sections
- Logarithms
- Trigonometry
- Advanced Trigonometry

Quantitative Problem Solving with Data and Statistics for the Accuplacer
- Permutations, Combinations, and Counting
- Series, Sequences and Patterns
- Vectors and Matrices for the College Series

Algebraic Problem Solving with Expressions for the Accuplacer
- Exponents and Roots
- Interpreting and Writing Expressions
- Adding and Subtracting Linear Expressions
- Multiplying and Factoring Linear Expressions
- Adding and Subtracting Polynomial Expressions
- Multiplying and Dividing Polynomial Expressions
- Factoring Polynomial Expressions
- Adding and Subtracting Rational Expressions
- Multiplying and Dividing Rational Expressions

Algebraic Problem Solving with Equations for the Accuplacer
- Linear Equations
- Solving Quadratic Equations
- One Variable Inequalities for the College Series
- Two Variable Linear Equations
- Systems of Linear Equations

Algebraic Problem Solving with Graphs and Functions for the Accuplacer
- Graphing on a Coordinate Plane
- Functions for the College Series
- Construct and Compare Models and Functions For the College Series

MATH PRACTICE TESTS

Aztec's 2014 GED®
Prep Series

REASONING THROUGH LANGUAGE ARTS	
RLA Diagnostic Pretest	**Analyzing Texts**
Central Ideas and Themes	Analyzing Arguments
Main Idea and Theme Development	Comparing Texts
Point of View and Author's Purpose	The Structure of Texts
Supporting Ideas	**Writing Skills**
Development of Individuals, Events, and Ideas in Texts	The Writing Process
Understanding Relationships	Elements of an Essay
Drawing Conclusions	Evidenced-based Writing
Interpreting Words and Phrases	Scoring Well on the Essay
Interpreting Words and Phrases	Rules for Capitalization and Punctuation
	Rules for Grammar and Usage Part 1
	Rules for Grammar and Usage Part 2
	RLA PRACTICE TESTS
SCIENCE	
Science Diagnostic Pretest	**Overview of Science Domains**
Science Skills	Overview of Life Science
Introduction to Scientific Thinking	Overview of Physical Science
Understanding Scientific Terms and Content	Overview of Earth and Space Science
Analyzing Data, Research, and Evidence	**SCIENCE PRACTICE TESTS**
Using Scientific Tools, Statistics, and Probability	
SOCIAL STUDIES	
Social Studies Diagnostic Pretest	
Civics and Government	**U.S. History and Economics**
Individual Rights and Civic Responsibilities	Fundamental Economic Concepts
The Bill of Rights	Macro, Micro, and Consumer Economics
Government Types and Their Contributing Principles	From Early Exploration to Manifest Destiny
The Structure of the US Government	From the Civil War through the Progressive Era
Political Parties, Interest Groups, and Policy	From the World Wars to the Cold War
Geography and the World	From the 1970s to Today
Geography and the World	**SOCIAL STUDIES PRACTICE TESTS**
MATHEMATICAL REASONING	
Math Diagnostic Pretest	**Algebraic Problem Solving with Expressions**
Quantitative Problem Solving with Rational Numbers	Interpreting and Writing Expressions
Numbers	Adding and Subtracting Linear Expressions
Number Properties and Forms	Multiplying and Factoring Linear Expressions
Mathematical Operations	The Unknown Value in Linear Expressions
Math Word Problems	Adding and Subtracting Polynomials
Unit Rates and Scaling	Multiplying and Dividing Polynomials
Ratios and Percentages	Factoring Polynomials
Exponents and Roots	The Unknown Value in Polynomial Expressions
Quantitative Problem Solving in Geometry	Adding and Subtracting Rational Expressions Multiplying and Dividing Rational Expressions
Pythagorean Theorem Geometric Properties and Operations	**Algebraic Problem Solving with Equations** Linear Equations
Solid Figures Composite Figures	Systems of Linear Equations One Variable Inequalities
Quantitative Problem Solving with Data and Statistics	Solving Quadratic Equations
Plots and Graphs	**Algebraic Problem Solving with Graphs and Functions**
Determining Probability	Graphing on a Coordinate Plane
Range, Mode, Median, and Mean	Two Variable Linear Equations
Permutations, Combinations, and Counting	Functions
	MATHMATICAL REASONING PRACTICE TEST

Aztec's HiSET Series

READING

Key Ideas and Details
- Main Idea and Theme Development
- Point of View and Author's Purpose
- Supporting Ideas
- Understanding Relationships
- Drawing Conclusions

Craft and Structure
- The Structure of Texts
- Interpreting Words and Phrases
- Tones in Writing
- Figurative Writing

Integration of Knowledge and Ideas
- Comparing Texts
- Analyzing Arguments
- Comparative Literature

Range and Complexity
- Anglo-Saxon Verse
- Medieval Narrative Verse
- Romantic Poetry
- 19th Century Literature
- American Literature of the 19th Century

READING PRACTICE TESTS

WRITING

Grammar and Mechanics
- The Rules of Grammar Part 1
- The Rules of Grammar Part 2
- Rules of Capitalization and Punctuation
- Rules for the Apostrophe and the Semicolon
- Rules for the Colon, Dash, Hyphen, and Ellipsis
- Review of Spelling Rules

Knowledge of Language
- Understanding Relationships
- Tones in Writing
- Visual Words
- Interpreting Words and Phrases

Developing the Essay
- Analyzing Arguments
- The Writing Process
- Elements of an Essay
- Evidence-based Writing

WRITING PRACTICE TESTS

SCIENCE

Science Applications
- Understanding Scientific Terms and Content
- Using Scientific Tools, Statistics, and Probability
- Analyzing Data, Research, and Evidence

SCIENCE PRACTICE TESTS

SOCIAL STUDIES

US History, Economics, Geography, and Civics
- Overview of US History
- Macro, Micro, and Consumer Economics
- Overview of Civics
- Geography and the World

SOCIAL STUDIES PRACTICE TESTS

MATHEMATICS

Diagnostic Pretest

Numbers and Operations on Numbers
- Numbers
- Order of Operations
- Reducing Fractions to Lowest Terms
- Changing Forms
- Multiplying and Dividing Fractions
- Adding and Subtracting Fractions
- Ordering of Decimals, Fractions, and Signed Numbers
- Unit Rates and Scaling
- Ratios and Percentages
- Exponents and Roots

Measurement / Geometry
- Changing Measurement Forms
- Angles
- Pairs of Angles
- Properties of Parallel Lines
- Finding the Distance Between Two Points
- Geometric Properties and Operations
- Solid Figures
- Composite Figures*
- Transformation, Similarity, and Congruence*

Data Analysis / Probability / Statistics
- Patterns
- Plots and Graphs
- Graphing on a Coordinate Plane
- Range, Mode, Median, and Mean

Algebraic Concepts
- Interpreting and Writing Expressions
- Linear Equations
- Adding and Subtracting Linear Expressions
- Multiplying and Factoring Linear Expressions
- The Unknown Value in Linear Expressions
- Systems of Linear Equations
- Adding and Subtracting Polynomials
- Multiplying and Dividing Polynomials
- Factoring Polynomials
- The Unknown Value in Polynomial Expressions
- Solving Quadratic Equations
- One Variable Inequalities
- Functions
- Construct and Compare Models and Functions

Math Practice Test

**These lessons are located in the Advanced Concepts Unit*

Aztec's TASC Series

READING

Key Ideas and Details
- Main Idea and Theme Development
- Point of View and Author's Purpose
- Supporting Ideas
- Understanding Relationships
- Drawing Conclusions

Craft and Structure
- The Structure of Texts
- Interpreting Words and Phrases
- Tones in Writing
- Figurative Writing

Integration of Knowledge and Ideas
- Comparing Texts
- Analyzing Arguments
- Comparative Literature

Range and Complexity
- Anglo-Saxon Verse
- Medieval Narrative Verse
- Renaissance Drama
- Romantic Poetry
- 19th Century Literature
- American Literature of the 19th Century

READING PRACTICE TESTS

WRITING

Grammar and Mechanics for the TASC
- Rules for Grammar and Usage Part 1
- Rules for Grammar and Usage Part 2
- Rules for Grammar and Usage Part 3
- Rules for Capitalization and Punctuation
- Rules for the Colon, Dash, Hyphen, and Ellipsis
- Rules for the Apostrophe and the Semicolon
- Review of Spelling Rules

Language in Context
- Interpreting Words and Phrases
- The Structure of Texts

Organization
- The Writing Process
- Elements of an Essay
- Evidence-based Writing

WRITING PRACTICE TESTS

SCIENCE

Overview of Science Domains
- Overview of Life Science
- Overview of Physical Science
- Overview of Earth and Space Science

Using Scientific Tools
- Using Scientific Tools, Statistics, and Probability

SCIENCE PRACTICE TESTS

SOCIAL STUDIES

Civics and Government
- Individual Rights and Civic Responsibilities
- The Bill of Rights
- Government Types and Their Contributing Principles
- The Structure of the US Government
- Political Parties, Interest Groups, and Policy

Geography and the World
- Geography and the World

Economics and History
- Fundamental Economic Concepts
- Macro, Micro, and Consumer Economics
- From Early Exploration to Manifest Destiny
- From the Civil War through the Progressive Era
- From the World Wars to the Cold War
- From the 1970s to Today

World History
- World History

SOCIAL STUDIES PRACTICE TESTS

MATHEMATICS

The Real Number System
- Numbers
- Number Properties and Forms
- Exponents and Roots
- Complex Numbers
- Plots and Graphs

Geometric Measurement and Modeling
- Pythagorean Theorem
- Geometric Properties and Operations
- Solid Figures
- Composite Figures
- Transformation, Similarity, and Congruence
- Advanced Geometry
- Trigonometry

Data and Statistics
- Applied Statistics
- Probability

Polynomials and Rational Expressions
- Adding and Subtracting Polynomials
- Multiplying and Dividing Polynomials
- Factoring Polynomials

Equations and Inequalities
- Linear Equations
- Systems of Linear Equations
- One Variable Inequalities
- Solving Quadratic Equations
- Graphing on a Coordinate Plane

Expressions
- Interpreting and Writing Expressions

Functions
- Functions
- Construct and Compare Models and Functions

MATH PRACTICE TESTS

Aztec's Bridge Series

A Pre High School Curriculum Aligned to TABE Level D
and Career and College Readiness Standards

READING

General Reading Skills
- Reading for Facts
- Inferences in Reading
- Understanding Actions and Results
- Similarities and Differences
- Understanding Character Traits
- Drawing Conclusions in Reading

Specific Reading Skills
- Reading Literature
- Reading Nonfiction
- Reading Historical Documents

Gathering Information
- Reading Graphical Information
- Understanding Graphs
- Interpreting Consumer Materials
- Using Reference Resources

WRITING

Language Mechanics
- Nouns and Verbs
- Pronouns
- Adjectives, Adverbs, and Other Parts of Speech
- Capitalization and Punctuation
- Common Writing Issues

Writing Skills
- Writing Logical Arguments
- Creating an Outline
- Writing an Essay
- Organization
- Style and Structure
- Language Selection
- Clutter
- Writing a Letter

Editing Skills
- Scanning Techniques
- Proofreading for Details

Spelling and Vocabulary
- Using Context Clues to Define Words
- Adding Suffixes and Plurals
- IE-EI Words
- Problem Words
- Words to Know: Language Arts
- Words to Know: Social Studies
- Words to Know: Science
- Words to Know: Math

READING

Letters and Sounds (E)
- Vowels
- Consonants
- Special Sounds
- Bossy R and Endings
- Silent Letters
- Big Words and Exceptions

Words and Sounds (M)
- Beginning and Ends of Words
- Reading Big Words
- Making Words Longer and Shorter
- Special Words and Exceptions

Becoming a Good Reader Part I (E)
- Stories About Sports
- Stories About Social Media
- Stories About Vacations
- Stories About Health
- Stories About Music

Becoming a Good Reader Part II (M)
- Stories About Cars
- Stories About Holidays
- Stories About Cooking
- Stories About Technology
- Stories About Space and Astronauts
- Stories About Family

Understanding What You Read Part I (E)
- Things to Do Before You Read Part I
- Things to Do While You Are Reading Part I
- Things to Do After You Read Part I

Understanding What You Read Part II (M)
- Things to Do Before You Read Part II
- Things to Do While You Are Reading Part II
- Things to Do After You Read Part II

Learning New Words Part I (E)
- Synonyms and Antonyms Part I
- Words All Around Us Part I
- Book Words Part I
- Everyday Words Part I

Learning New Words Part II (E)
- Synonyms and Antonyms Part II
- Words All Around Us Part II
- Book Words Part II
- Everyday Words Part II

Using Words and Phrases for Effect (E)
- Using Words and Phrases for Effect Part I

Using Words and Phrases for Effect (M)
- Using Words and Phrases for Effect Part II

Parts of Stories (E)
- Structure of Stories
- Characters and Style of Writing
- Language

Looking at Stories (M)
- Understanding All Sides to a Story
- Who Wrote the Story and Why?
- Reading Smarter
- Types of Stories and Language

Reading in Diverse Media Formats Part I (E)
- Using the Dictionary Part I
- Reading Graphical Information Part I
- Using Technology Part I
- Making Decisions as Consumers
- Understanding Text Features

Reading in Diverse Media Formats Part II (M)
- Using the Dictionary Part II
- Reading Graphical Information Part II
- Using Technology Part II

Comparing Texts (M)
- Compare, Contrast, Comprehend

USING LANGUAGE

Writing Part I (E)
- Linking Words and Phrases Part I
- Making Sentences Part I
- Writing the Introduction Part I
- Developing the Topic Part I
- Writing Conclusions Part I
- Editing and Revising Part I
- Writing Creative, Informative, and Persuasive Pieces Part I

Writing Part II (M)
- Making Sentences Part II
- Making Paragraphs Part I
- Making Paragraphs Part II
- The Introduction Part II
- Developing the Topic Part II
- Writing Conclusions Part II
- Editing and Revising Part II
- Writing Creative, Informative, and Persuasive Pieces Part II
- Letter Parts

Grammar and Usage (E)
- Nouns and Verbs
- Pronouns Part I
- Adjectives and Adverbs Part I
- Conjunctions
- Using Your Grammar Skills Part I

More About Grammar and Usage (M)
- More About Verbs
- Pronouns Part II
- Antecedent Agreement
- Prepositions
- Adjectives and Adverbs Part II
- Using Negative Words
- Frequently Confused Words
- Using Conjunctions, Prepositions, and Interjections
- Using Your Grammar Skills Part II

Capitalization, Spelling, and Punctuation (M)
- Using Capital Letters
- Contractions and Possessives
- Spelling
- Using Commas Part I
- Using Commas Part II
- Using End Marks
- Edit for Spelling, Capitalization, Punctuation

Using All Your Skills
- Planning a Vacation

Aztec Math Mastery Series

LESSON	OBJECTIVES
NUMBERS	
Basic Mathematical Operations	
Multiplication Vocabulary	• Recognize integers, factors, multiples, prime numbers, and composite numbers
Dividing with No Remainder	• Perform long division where there is no remainder
Dividing with a Remainder	• Perform long division where there is a remainder
Divisibility Tests	• Recognize if a number is divisible by 2, 3, 4, 5, or 10 by using a divisibility test
Rounding	• Recognize when to use rounding
Adding and Subtracting Decimals	• Perform addition and subtraction of decimal numbers
Multiplying Decimals	• Determine the number of decimal places in a problem • Apply the rules of multiplying decimal numbers
Dividing Decimals	• Apply the rules of dividing decimal numbers
Problem Solving Using Decimals	• Use addition, subtraction, multiplication, and division of decimals to solve real world problems
Reducing Fractions to Lowest Terms	• Use division to reduce fractions to lowest terms
Identifying the Form of a Number	• Identify a number's form as whole number, fraction, decimal, or mixed number
Changing Forms	• Change fractions to mixed numbers • Change mixed numbers to fractions • Change fractions to decimals • Change decimals to fractions • Change mixed numbers to decimal numbers • Change decimals to mixed numbers
Multiplying and Dividing Fractions	• Multiply fractions and reduce them to lowest terms • Multiply fractions by whole numbers • Divide fractions
Adding and Subtracting Fractions	• Determine the least common denominator of two fractions • Change fractions to equivalent ones with the least common denominator • Add and subtract fractions with the same and different denominators
Problem Solving Using Fractions	• Use addition, subtraction, multiplication, and division of fractions to solve real world problems

Measurement	
Understanding Common Measurements	• Understand measurements used for distance, area, volume, weight, temperature, and time • Understand symbols and abbreviations used for common measurements • Convert from one type of unit to another
Doing Math with Common Measurements	• Calculate the perimeter and area given dimensions in common measurements • Add and subtract measurements • Use grouping to change units
Problem Solving with Common Measurements	• Use addition, subtraction, multiplication, and division of common measurements to solve real world problems
Metrics	
Understanding Metrics	• Identify and use metric prefixes • Understand the metric unit used to measure temperature
Converting Within the Metric System	• Compare and convert metric units to other metric units
Appropriate Metric Units	• Select the best metric unit to measure weight, length, and volume
Doing Math with Metrics	• Use addition, subtraction, multiplication, and division of metric measurements to solve real world problems
Changing Measurement Forms	• Convert common measurements to their metric equivalents • Convert metric measurements to their common equivalents
Problem Solving Using Metrics	• Solve real world math problems using metrics
Using Basic Math Skills	
Understanding and Comparing Unit Prices	• Understand unit pricing • Calculate the unit price • Find the better deal
Understanding Discounts	• Determine discount price when the discount is a percentage, fraction, or dollar amount • Compare discount prices
Introduction to Math Problem Solving	• Ask the questions necessary to solve math problems requiring more than one math skill • Determine if an answer is reasonable • Use general math skills for real world applications
Order of Operations	• Use the correct order of operations to solve problems
Positive and Negative Numbers and the Number Line	
Ordering of Decimals, Fractions, and Signed Numbers	• Order fractions and decimals on a number line • Compare fractions with different numerators and denominators

	• Understand absolute value and how it relates to the number line
Adding and Subtracting Negative Numbers	• Determine the magnitude of positive and negative numbers • Add positive and negative numbers • Subtract positive and negative numbers
Multiplying and Dividing with Negative Numbers	• Compute the product of positive and negative numbers • Divide using positive and negative numbers
Using Positive and Negative Integers	• Add, subtract, multiply and divide with positive and negative integers
Problem Solving with Positive and Negative Numbers	• Use positive and negative numbers to solve real world problems
Ratios and Percentages	
Ratios	• Compare two quantities using ratios • Convert ratios to lowest terms
Equivalent Ratios	• Create tables of equivalent ratios • Determine missing values in tables containing equivalent ratios • Use tables to compare ratios
Understanding Unit Rates and Scaling	• Compute unit pricing, constant speed, and other unit rates • Solve problems involving scale drawings
Percentages	• Convert decimals or fractions to percentages • Convert percentages to decimals or fractions • Add, subtract, multiply, and divide percentages • Round percentages • Solve problems involving percentages
Number and Quantity	•
Numbers	• Order fractions and decimals on a number line • Compare fractions with different numerators and denominators • Understand absolute value and how it relates to the number line
Number Properties and Forms	• Apply number properties involving multiples and factors, including greatest common factor and least common multiple • Use the distributive property to rewrite numeric expressions • Understand where an expression is undefined
Complex Numbers	• Identify the parts and types of complex numbers • Perform arithmetic operations with complex numbers • Utilize complex number patterns to solve problems

Vectors and Matrices	• Represent and model with vector quantities • Perform operations on vectors • Perform operations on matrices and use matrices in applications
Algebra	
Algebra Basics	
Understanding Algebra	• Locate the variable in an equation • Determine the number which is the opposite of an integer • Determine the absolute value of a number
Algebra Concepts	• Understand symbols used in algebraic expressions • Recognize algebraic terms and expressions • Understand the steps required to solve an algebraic equation • Determine if an algebraic solution is correct
Exponents	• Identify the base and the exponent • Convert an expression into exponential notation • Use the order of operations to evaluate exponential expressions
Roots and Radicals	• Identify a radical sign • Evaluate square roots and cube roots whose values are integers • Estimate square roots whose values are not integers
Algebra Problem Solving with Expressions	
Interpreting and Writing Expressions	• Interpret the structure of expressions • Write expressions in equivalent forms in order to solve problems
Adding and Subtracting Linear Expressions	• Identify linear expressions • Add and subtract linear expressions by combining like terms
Multiplying and Factoring Linear Expressions	• Expand linear expressions • Multiply linear expressions • Factor linear expressions
The Unknown Value in Linear Expressions	• Evaluate linear expressions by substituting integers for unknown quantities • Write linear expressions as part of word-to-symbol translations
Adding and Subtracting Polynomial Expressions	• Identify polynomial expressions • Add and subtract polynomial expressions by combining like terms
Multiplying and Dividing Polynomials Expressions	• Identify monomials and polynomials • Multiply monomials • Multiply polynomials using multiple methods • Divide monomials
Factoring Polynomial Expressions	• Factor polynomial expressions using a variety of techniques: Difference of two squares, trinomial factorization, and FOIL

The Unknown Value in Polynomial Expressions	• Evaluate polynomial expressions by substituting integers for unknown variables • Write polynomial expressions to solve real-world arithmetic problems
Adding and Subtracting Rational Expressions	• Understand rational expressions • Add rational expressions • Subtract rational expressions
Multiplying and Dividing Rational Expressions	• Multiply rational expressions • Divide rational expressions
Algebra Problem Solving with Equations	
Solving One-Step Equations	• Apply the Addition Rule, Subtraction Rule, and Multiplication/Division Rule to solve one-step equations
Solving Two-Step Equations	• Apply the Addition Rule, Subtraction Rule, and Multiplication/Division Rule to solve one-step equations
Solving Multi-Step Equations	• Solve equations requiring more than two steps, including distribution and combining like terms
Working with Inequalities	• Recognize inequality symbols • Understand and use the rules of solving inequalities • Solve problems involving inequalities
Solving Systems of Equations by Substitution	• Solve a system of two simultaneous linear equations by graphing or substitution • Determine the number of solutions to a system
Solving Systems of Equations by Elimination	• Solve a system of two simultaneous linear equations by elimination • Solve real world problems leading to a system of linear equations
Linear Equations	• Solve one-variable linear equations • Solve real-world problems involving linear equations • Write linear equations to represent context
Systems of Linear Equations	• Solve a system of two simultaneous linear equations by graphing, substitution, or linear combination • Solve real-world problems leading to a system of linear equations
One Variable Inequalities	• Solve linear inequalities in one variable with rational number coefficients • Identify and graph the solution to a one-variable linear inequality on a number line • Solve real-world problems involving inequalities • Write linear inequalities in one variable to represent context
Two Variable Linear Equations	• Graph two-variable linear equations
Solving Quadratic Equations	• Understand how to identify quadratic equations • Solve quadratic equations by completing the square, factoring, or using the

	quadratic formula • Write one-variable quadratic equations to represent context
Functions	
Interpreting and Building Functions	
Patterns	• Understand and identify patterns • Predict the next number in a sequence • Use patterns to complete input output tables
Basics of Functions	• Identify dependent and independent variables • Identify a function using graphs and tables • Use functions to model real world situations
Coordinate Geometry	• Recognize the x axis and the y axis • Locate and plot points on the coordinate plane
Graphing Lines	• Determine the slope of a line from a graph, equation, or table • Determine the equation of a line given a point and slope • Determine if two lines on a coordinate plane are parallel, perpendicular, or neither • Interpret unit rate as the slope in a proportional relationship
Functions for the College Series	• Identify a function and key characteristics of functions • Describe behaviors of functions • Compare functions • Evaluate functions for values • Write an expression for the composition of two simple functions • Evaluate composite functions at integer values
Construct and Compare Models and Functions for the College Series	• Construct and compare linear, quadratic, and exponential models and solve problems • Build new functions from existing functions by transformation
Series, Sequences, and Patterns	• Identify patterns in arithmetic and geometric sequences • Calculate specific terms in sequences given a subset of terms or the first term and a common difference or ratio
Geometry and Trigonometry	
Geometry Basics	
Geometry Basics	• Identify a point, line, line segment, and ray • Identify a right angle, acute angle, obtuse angle, and straight angle
Angles	• Identify the different types of angles • Identify the different types of triangles
Triangles	• Compute the perimeter and area of triangles

	• Recognize isosceles, scalene, equilateral, and right triangles • Compute the measure of the missing angle of a triangle • Identify interior and exterior angles • Compute the measure of exterior angles
Quadrilaterals	• Recognize a rectangle, square, parallelogram, rhombus, and trapezoid • Compute the perimeter and area of quadrilaterals
Polygons	• Define, describe, and recognize polygons • Name a polygon by its number of sides
Symmetry	• Recognize symmetry • Understand where the line of symmetry is on an object • Understand rotational symmetry
Transformations	• Recognize rotations, reflections, and translations of figures • Describe a sequence of transformations to make two figures congruent
Circles	• Recognize the center, radius, and diameter of a circle • Compute the circumference of a circle • Compute the area of a circle
Volume	• Recognize rectangular solids, cubes, and cylinders • Determine the volume of a rectangular solid, a cube, and a cylinder • Use the volume formula to find the missing value
Spatial Relationships	• Understand the difference between 2D and 3D figures • Recognize different views of a 3D object • Compare sizes visually
Problem Solving with 2D and 3D Objects	• Draw and label figures described in a problem • Determine which geometric formula to use for a problem • Solve application problems involving geometry • Check answers by using the words of a problem
Pairs of Angles	• Identify adjacent, vertical, complementary, and supplementary angle pairs • Calculate angle measure based on properties of angle pairs
Properties of Parallel Lines	• Identify parallel lines and transversals • Find the measures of angles created by parallel lines and transversals
Pythagorean Theorem Basics	• Identify the hypotenuse and legs of a right triangle • Use the Pythagorean Theorem to find the missing side of a right triangle

Finding the Distance Between Two Points	• Use the Pythagorean Theorem to find the distance between two points
Transformations on a Coordinate Plane	• Recognize rotations, reflections, translations, and dilations of figures on a coordinate plane • Describe the sequence of transformations needed to make two figures congruent
Advanced Geometry and Trigonometry	
Pythagorean Theorem	• Determine unknown side lengths in a right triangle • Apply the Pythagorean Theorem in real-world settings and mathematical problems
Solid Figures	• Calculate the volume and surface area of prisms, cylinders, right pyramids, cones and spheres • Solve real-world problems involving solid figures
Composite Figures	• Compute the perimeter and area of composite geometric figures • Solve real-world problems involving composite figures • Compute the volume and surface area of composite 3D geometric figures • Solve real-world problems involving composite 3D geometric figures
Advanced Geometry	• Understand and apply theorems involving circles • Convert between degrees and radians • Calculate arc length and areas of sectors of circles
Trigonometry	• Define trigonometric ratios • Apply trigonometry to general triangles
Advanced Trigonometry	• Understand the differences between different types of angles • Apply the characteristics of special triangles • Use trigonometric identities • Identify values on a unit circle • Evaluate trigonometric equations and inequalities • Convert from Cartesian coordinates to polar coordinates
Transformation, Similarity, and Congruence	• Produce transformations in a plane • Understand similarity • Prove theorems involving similarity • Define and identify congruent shapes
Logarithms	• Define and recognize logarithmic functions, including natural and common logarithms • Convert logarithmic functions to exponential functions • Compare and evaluate logarithmic functions • Understand and use the properties of

	logarithms
Conic Sections	• Understand the concept of a conic section • Identify various types of conic sections visually and algebraically
Statistics and Probability	
Basic Statistics and Probability	
Averages	• Calculate the average of several numbers in real world problems
Locating Information	• Understand and use common types of forms, tables, charts, and graphs to locate information
Gathering Information	• Ask questions needed in gathering data • Create a data table • Determine the type of graph or chart best to use • Label graphs
Interpreting Data	• Read and interpret information from different types of graphs and charts
Summarizing Information	• Use graphs and charts to make predictions • Identify and consider variables when making predictions
Introduction to Statistics	• Understand the common ways of classifying data
Sampling	• Understand how a valid sample can provide information about a population • Understand that a sample must be a good representation of the population for a generalization to be made • Recognize random samples
Measures of Central Tendency	• Understand mean, median, and mode • Compute mean, median, mode, and range
Basic Probability	• Understand mean, median, and mode • Compute mean, median, mode, and range
Advanced Statistics and Probability	
Probability	• Understand what probability is and how it is used • Determine the differences between simple and compound events • Use a basic knowledge of probability to solve problems and draw conclusions • Differentiate between dependent and independent events
Determining Probability	• Understand what probability is and how it is used • Determine the differences between simple and compound events • Use a basic knowledge of probability to solve problems and draw conclusions
Permutations, Combinations, and Counting	• Understand permutations and combinations • Use the Fundamental Counting Principle in everyday situations
Applied Statistics	• Understand the basic uses for statistics

	• Identify and organize data by type and use • Calculate expected values and use them to solve problems • Use probability to evaluate outcomes of decisions

MATHEMATICS

Numbers and Counting
- Counting and Ordering Numbers (E)
- Counting Odd and Even Numbers (E)
- Understanding Place Value (E)
- Reading and Writing Numbers (E)
- Comparing Whole Numbers (E)
- Using Decimals (E)
- Comparing Decimals (E)
- Rounding Numbers (E)
- Using Fractions: Part 1 (E)
- Using Fractions: Part 2 (E)
- Converting Between Decimals and Fractions (E)
- Introduction to Math Operations (E)

Addition with Whole Numbers Unit
- Basic Addition of Whole Numbers: Part 1 (E)
- Basic Addition of Whole Numbers: Part 2 (E)
- Basic Addition of Whole Numbers with Carry Over: Part 1 (M)
- Basic Addition of Whole Numbers with Carry Over: Part 2 (M)
- Addition with More Than Two Numbers (M)

Subtraction with Whole Numbers
- Basic Subtraction of Whole Numbers: Part 1 (E)
- Basic Subtraction of Whole Numbers: Part 2 (E)
- Basic Subtraction of Whole Numbers with Borrowing: Part 1 (M)
- Basic Subtraction of Whole Numbers with Borrowing: Part 2 (M)

Multiplication with Whole Numbers
- Basic Multiplication of Whole Numbers: Part 1 (E)
- Basic Multiplication of Whole Numbers: Part 2 (E)
- Basic Multiplication of Whole Numbers with Carry Over: Part 1 (M)
- Basic Multiplication of Whole Numbers with Carry Over: Part 2 (M)

Division with Whole Numbers
- Basic Division of Whole Numbers: Part 1 (E)
- Basic Division of Whole Numbers: Part 2 (M)
- Basic Division of Whole Numbers with Remainders: Part 1 (E)
- Basic Division of Whole Numbers with Remainders: Part 2 (M)
- Using Divisibility Tests (M)
- Estimating a Value (E)

Operations with Decimals and Fractions
- Adding and Subtracting Decimals (E)
- Multiplying and Dividing Decimals (M)
- Adding and Subtracting Fractions with the Same Denominators (M)

Problem Solving and Reasoning
- Signal Words in Word Problems (E)
- Steps to Solving Word Problems (E)

Everyday Math Skills
- Math Problems with Multiple Operations(E)
- Understanding Money (E)
- Math Problems Using Money (M)
- Finding an Average (M)

Mathematical Properties
- Using the Commutative Property (E)
- Using the Associative Property (E)
- Using the Distributive Property (E)

Factors and Multiples
- Finding Factors (M)
- Finding Multiples (M)

Measurement for Foundations
- Measuring Length and Distance (E)
- Measuring Mass and Weight (E)
- Measuring Time (E)
- Measuring Temperature (M)

Geometry for Foundations
- Identifying Shapes (E)
- Solid Figures (E)
- Problem Solving with Shapes and Figures (E)
- Lines (M)
- Triangles (M)
- Congruence and Similarity (M)

Data Analysis
- Data Collection (E)
- Reading and Using Maps (E)
- Types of Graphs and Charts: Part 1 (E)
- Types of Graphs and Charts: Part 2 (E)
- Reading Data from Graphs and Charts (M)
- Creating Graphs and Charts from Data (M)

Statistics and Probability for Foundations
- Basics of Statistics (E)
- Basics of Probability (E)

Preparing for Algebra
- Algebra Vocabulary (E)
- Writing Basic Equations (E)
- Patterns (E)

Updated 1/28/2015

Aztec's Bridge Series

A Pre High School Curriculum Aligned to TABE Level D
and Career and College Readiness Standards

MATHEMATICS

Whole Numbers for the Bridge Series
- Multiplication Vocabulary
- Dividing with no Remainder
- Dividing with a Remainder
- Divisibility Tests

Decimals
- Rounding
- Adding and Subtracting Decimals
- Multiplying Decimals
- Dividing Decimals
- Problem Solving Using Decimals

Fractions
- Reducing Fractions to Lowest Terms
- Identifying the Form of a Number
- Changing Forms

Operations with Fractions
- Adding and Subtracting Fractions
- Multiplying and Dividing Fractions
- Problem Solving Using Fractions

Common Measurements
- Understanding Common Measurements
- Doing Math with Common Measurements

Metric Measurements
- Understanding Metrics
- Converting within the Metric System
- Appropriate Metric Units
- Doing Math with Metrics
- Changing Measurement Forms
- Problem Solving Using Metrics

Averages, Graphs, and Charts
- Averages
- Locating Information
- Gathering Information
- Interpreting Data
- Summarizing Information

The Cost of Living
- Understanding and Comparing Unit Prices
- Understanding Discounts
- Introduction to Math Problem Solving

Positive and Negative Numbers
- Ordering of Decimals, Fractions, and Signed Numbers
- Adding and Subtracting Negative Numbers
- Multiplying and Dividing with Negative Numbers
- Order of Operations
- Using Positive and Negative Integers
- Problem Solving with Positive and Negative Numbers

Solving Linear Equations and Inequalities
- Understanding Algebra
- Algebra Concepts
- Solving One-Step Equations
- Solving Two-Step Equations
- Solving Multi-Step Equations
- Working with Inequalities
- Problem Solving in Algebra

Ratios, Proportions, and Percentages
- Ratios
- Equivalent Ratios
- Understanding Unit Rates and Scaling
- Percentages

Functions and Graphs
- Patterns
- Basics of Functions
- Coordinate Geometry
- Graphing Lines
- Solving Systems of Equations by Substitution
- Solving Systems of Equations by Elimination

Exponents and Radicals
- Exponents
- Roots and Radicals
- Rational and Irrational Numbers
- Solving Basic Radical Equations

Foundations of Geometry
- Geometry Basics
- Angles
- Triangles
- Quadrilaterals
- Polygons
- Symmetry
- Transformations

Circles and 3D Objects
- Circles
- Volume
- Spatial Relationships
- Problem Solving with 2D and 3D Objects

Geometry for the Bridge Series
- Pairs of Angles
- Properties of Parallel Lines
- Pythagorean Theorem Basics
- Finding the Distance between Two Points
- Transformations on a Coordinate Plane

Statistics for the Bridge Series
- Introduction to Statistics
- Sampling
- Measures of Central Tendency
- Basic Probability