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TEACH™ Pre-AP Unit Overview

AP Skills & Practices Alignment

ELA Grade 6

And Now... the News*

Driving Question: *How can we, as journalists, help our audience better understand the world?*

Summary: Tell a story that matters! Students produce a team news broadcast by analyzing sources, synthesizing information, and reporting on a topic relevant to their community.

AP Language & Composition Skills:

- **Reasoning and Organization – Reading 5.B**: Explain how the organization of a text creates unity and coherence and reflects a line of reasoning.
- **Reasoning and Organization – Writing 6.B**: Use transitional elements to guide the reader through the line of reasoning of an argument.
- **Reasoning and Organization – Writing 6.C**: Use appropriate methods of development to advance an argument.

Stories We Tell*

Driving Question: *How can we use storytelling to share the values that are important to us?*

Summary: Pass it on! Students craft and share personal stories that highlight meaningful values, continuing the global tradition of storytelling for a younger audience.

AP Literature & Composition Skills:

- **Setting 2.B:** Explain the function of setting in a narrative.
- **Structure 3.A**: Identify and describe how plot orders events in a narrative.
- **Structure 3.C:** Explain the function of structure in a text.

*Project also covers learning objectives from Pre-AP English 1 and transferable skills and proficiencies from AP Seminar.

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ELA Grade 7

Belonging*

Driving Question: *What does it mean to belong?*

Summary: Find your place—and share it. Students explore narratives of belonging, then create team documentaries that highlight stories of inclusion and identity.

AP Language & Composition Skills:

- **Rhetorical Situation – Reading 1.A:** Identify and describe components of the rhetorical situation: the exigence, audience, writer, purpose, context, and message.
- **Reasoning and Organization – Reading 5.B**: Explain how the organization of a text creates unity and coherence and reflects a line of reasoning.

AP Literature & Composition Skills:

- **Setting 2.B**: Explain the function of setting in a narrative.
- **Structure 3.C**: Explain the function of structure in a text.

Becoming an Influencer*

Driving Question: *How can I use my voice to influence my peers?*

Summary: Use your voice to make change! Students create social media campaigns that influence peer behavior using persuasive language and credible information.

AP Language & Composition Skills:

- **Rhetorical Situation – Reading 1.A:** Identify and describe components of the rhetorical situation: the exigence, audience, writer, purpose, context, and message.
- **Claims and Evidence – Reading 3.A:** Identify and explain claims and evidence within an argument.
- **Claims and Evidence – Writing 4.A:** Develop a paragraph that includes a claim and evidence supporting the claim.
- **Reasoning and Organization – Writing 6.A:** Develop a line of reasoning and commentary that explains it throughout an argument.
- **Reasoning and Organization – Writing 6.B:** Use transitional elements to guide the reader through the line of reasoning of an argument.
- **Reasoning and Organization – Writing 6.C:** Use appropriate methods of development to advance an argument.

*Project also covers learning objectives from Pre-AP English 1 and transferable skills and proficiencies from AP Seminar.

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ELA Grade 8

Beyond the Hype*

Driving Question: *How can we create advertisements that work for clients and that consumers can trust?*

Summary: Truth in advertising! Students explore marketing ethics and pitch persuasive campaigns that balance influence with consumer trust.

AP Language & Composition Skills:

- **Rhetorical Situation – Reading 1.A:** Identify and describe components of the rhetorical situation: the exigence, audience, writer, purpose, context, and message.
- **Rhetorical Situation – Writing 2.A:** Write introductions and conclusions appropriate to the purpose and context of the rhetorical situation.
- **Claims and Evidence – Reading 3.A:** Identify and explain claims and evidence within an argument.
- **Claims and Evidence – Writing 4.A:** Develop a paragraph that includes a claim and evidence supporting the claim.
- **Claims and Evidence – Writing 4.B:** Write a thesis statement that requires proof or defense and that may preview the structure of the argument.
- **Reasoning and Organization – Reading 5.A:** Describe the line of reasoning and explain whether it supports an argument's overarching thesis.
- **Reasoning and Organization – Writing 6.A:** Develop a line of reasoning and commentary that explains it throughout an argument.
- **Reasoning and Organization – Writing 6.B:** Use transitional elements to guide the reader through the line of reasoning of an argument.
- **Reasoning and Organization – Writing 6.C:** Use appropriate methods of development to advance an argument.
- **Style – Writing 8.A:** Strategically use words, comparisons, and syntax to convey a specific tone or style in an argument.

Teenage Truths*

Driving Question: *How can we use storytelling to help adults understand what it's like to be a teenager today?*

Summary: Tell it like it is. Students craft multi-format experimental stories that reveal powerful truths about teen life, then share them at a schoolwide Narrative Festival.

AP Literature & Composition Skills:

- **Setting 2.B:** Explain the function of setting in a narrative.
- **Structure 3.B:** Explain the function of a particular sequence of events in a plot.

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- **Structure 3.C:** Explain the function of structure in a text.
- **Figurative Language 5.A:** Distinguish between the literal and figurative meanings of words and phrases.
- **Figurative Language 5.B:** Explain the function of specific words and phrases in a text.

*Project also covers learning objectives from Pre-AP English 1 and transferable skills and proficiencies from AP Seminar.

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TEACH™ Pre-AP Units

AP Skills & Practices Alignment

Math Grade 6

Community Recipes

Driving Question: *How can we share and preserve community recipes?*

Summary: Food brings stories to life! Students scale meaningful recipes using ratios and proportions, then publish their creations in a personal, community-rooted food blog.

AP Mathematical Practices for Precalculus:

- **Multiple Representations 2.A:** Identify information from graphical, numerical, analytical, and verbal representations to answer a question or construct a model, with and without technology.
- **Multiple Representations 2.B:** Construct equivalent graphical, numerical, analytical, and verbal representations of functions that are useful in a given mathematical or applied context, with and without technology.
- **Communication and Reasoning 3.B:** Apply numerical results in a given mathematical or applied context.
- **Communication and Reasoning 3.C:** Support conclusions or choices with a logical rationale or appropriate data.

Pack Perfection*

Driving Question: *How can we design a custom backpack that meets the needs of our client?*

Summary: Design meets function! Students use area and volume to create custom backpacks that balance storage capacity, size, and style—based on real client needs.

AP Mathematical Practices for Precalculus:

- **Multiple Representations 2.A:** Identify information from graphical, numerical, analytical, and verbal representations to answer a question or construct a model, with and without technology.
- **Communication and Reasoning 3.B:** Apply numerical results in a given mathematical or applied context.
- **Communication and Reasoning 3.C:** Support conclusions or choices with a logical rationale or appropriate data.

*Project also covers learning objectives from Pre-AP Geometry with Statistics.

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Math Grade 7

Cooperative Student Store*

Driving Question: *How can we open a school co-op?*

Summary: Run the numbers to run the store! Students use proportional reasoning and data to stock products, set prices, and support their community through co-op business decisions.

AP Mathematical Practices for Precalculus:

- **Multiple Representations 2.B:** Construct equivalent graphical, numerical, analytical, and verbal representations of functions that are useful in a given mathematical or applied context, with and without technology.
- **Communication and Reasoning 3.B:** Apply numerical results in a given mathematical or applied context.
- **Communication and Reasoning 3.C:** Support conclusions or choices with a logical rationale or appropriate data.

Diamond in the Rough**

Driving Question: *How can we design a custom diamond that meets the wishes of our client?*

Summary: Geometry gets glamorous! Students analyze diamond cuts using surface area, volume, and symmetry to design jewelry that balances brilliance and mathematical reasoning.

AP Mathematical Practices for Precalculus:

- **Multiple Representations 2.A:** Identify information from graphical, numerical, analytical, and verbal representations to answer a question or construct a model, with and without technology.
- **Communication and Reasoning 3.B:** Apply numerical results in a given mathematical or applied context.
- **Communication and Reasoning 3.C:** Support conclusions or choices with a logical rationale or appropriate data.

*Project also covers learning objectives from Pre-AP Algebra 1.
**Project also covers learning objectives from Pre-AP Geometry with Statistics.

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Math Grade 8

Be Your Own Boss*

Driving Question: *How can we be impactful entrepreneurs?*

Summary: Turn ideas into impact! Students design a startup, model profits with linear functions, and pitch their business in a Shark Tank–style showcase.

AP Mathematical Practices for Precalculus:

- **Multiple Representations 2.A:** Identify information from graphical, numerical, analytical, and verbal representations to answer a question or construct a model, with and without technology.
- **Communication and Reasoning 3.A:** Describe the characteristics of a function with varying levels of precision, depending on the function representation and available mathematical tools.
- **Communication and Reasoning 3.C:** Support conclusions or choices with a logical rationale or appropriate data.

Get Your Game On**

Driving Question: *How do we design computer games that represent teenage interests?*

Summary: Code with a twist! Students remix a Scratch game using rigid transformations and dilations to animate visuals and personalize the story, design, and gameplay.

AP Mathematical Practices for Precalculus:

- **Multiple Representations 2.A:** Identify information from graphical, numerical, analytical, and verbal representations to answer a question or construct a model, with and without technology.

*Project also covers learning objectives from Pre-AP Algebra 1.
**Project also covers learning objectives from Pre-AP Geometry with Statistics.

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Math Algebra 1

Family Financials*

Driving Question: *How can we help families achieve their financial goals?*

Summary: Students act as financial analysts to model savings and investments, compare linear and exponential growth, and create clear plans to meet client goals.

AP Mathematical Practices for Precalculus:

- **Multiple Representations 2.A:** Identify information from graphical, numerical, analytical, and verbal representations to answer a question or construct a model, with and without technology.
- **Multiple Representations 2.B:** Construct equivalent graphical, numerical, analytical, and verbal representations of functions that are useful in a given mathematical or applied context, with and without technology.
- **Communication and Reasoning 3.C:** Support conclusions or choices with a logical rationale or appropriate data.

Helpful Habits*

Driving Question: *How can we change our lifestyle to improve our school experience?*

Summary: Data meets discovery! Students survey peers, graph trends in habits and GPA, and model patterns using linear, quadratic, or exponential functions.

AP Mathematical Practices for Precalculus:

- **Multiple Representations 2.B:** Construct equivalent graphical, numerical, analytical, and verbal representations of functions that are useful in a given mathematical or applied context, with and without technology.
- **Communication and Reasoning 3.C:** Support conclusions or choices with a logical rationale or appropriate data.

*Project also covers learning objectives from Pre-AP Algebra 1.

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TEACH™ Pre-AP Unit Overview

AP Skills & Practices Alignment

Science Grade 6

Cool Communities

Driving Question: *How can we cool our community?*

Summary: Turn down the heat. Students investigate urban heat islands and design science-based solutions to make neighborhoods cooler, safer, and more livable.

AP Environmental Science Practices:

- **Concept Explanation 1.C:** Explain environmental concepts, processes, or models in applied contexts.
- **Visual Representations 2.A:** Describe characteristics of an environmental concept, process, or model represented visually.
- **Scientific Experiments 4.B:** Identify a research method, design, and/or measure used.
- **Scientific Experiments 4.D:** Make observations or collect data from laboratory setups (not assessed).
- **Data Analysis 5.C:** Explain patterns and trends in data to draw conclusions.

Digging Deep*

Driving Question: *How can we reduce the impacts of natural resource extraction?*

Summary: Think below the surface. Students explore fossil fuel extraction and design solutions to monitor or reduce its environmental and community impact.

AP Environmental Science Practices:

- **Concept Explanation 1.C:** Explain environmental concepts, processes, or models in applied contexts.
- **Concept Explanation 1.B:** Explain environmental concepts and processes.
- **Visual Representations 2.B:** Explain relationships between different characteristics of environmental concepts, processes, or models represented visually in theoretical and/or applied contexts.
- **Scientific Experiments 4.A:** Identify a testable hypothesis or scientific question for an investigation.
- **Scientific Experiments 4.B:** Identify a research method, design, and/or measure used.
- **Data Analysis 5.E:** Explain what the data implies or illustrates about

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environmental issues.
- **Environmental Solutions 7.A:** Describe environmental problems.
- **Environmental Solutions 7.D:** Use data and evidence to support a potential solution in theoretical and/or applied contexts.

*Project also covers learning objectives from Pre-AP Biology.

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Science Grade 7

Families and Fermentation*

Driving Question: *How can we ensure safe fermented foods for our families?*

Summary: Preserve the flavor, share the science. Students investigate fermentation at the molecular level and present recipes and safety tips at a community food fair.

AP Chemistry Science Practices:

- **Representing Data and Phenomenon 3.B:** Represent chemical substances or phenomena with appropriate diagrams or models (e.g., electron configuration).
- **Model Analysis 4.A:** Predict and/or explain chemical properties or phenomena (e.g., of atoms or molecules) using given chemical theories, models, and representations.

Growing Greens**

Driving Question: *How can we increase access to fresh food in our community?*

Summary: Farm the future. Students explore urban agriculture and apply science to design sustainable growing systems that boost food access in their communities.

AP Biology Science Practices:

- **Concept Explanation 1.A:** Describe biological concepts and processes.
- **Concept Explanation 1.B:** Explain biological concepts and processes.
- **Visual Representations 2.D:** Represent relationships within biological models, including mathematical models, diagrams, flowcharts, and systems.
- **Visual Representations 2.C:** Explain how biological models relate to larger principles, concepts, processes, systems, or theories.
- **Argumentation 6.C:** Provide reasoning to justify a claim by connecting evidence to biological theories.

*Project also covers learning objectives from Pre-AP Chemistry.
**Project also covers learning objectives from Pre-AP Biology.

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Science Grade 8

Chicken Pick'n*

Driving Question: *How can I breed the best chickens for my environment?*

Summary: Breed for success. Students use genetics to recommend chicken breeds for backyard flocks, then share practical guides tailored to client needs and environments.

AP Biology Science Practices:

- **Concept Explanation 1.B:** Explain biological concepts and processes.
- **Concept Explanation 1.C:** Explain biological concepts and processes in applied contexts.
- **Visual Representations 2.D:** Represent relationships within biological models, including mathematical models, diagrams, flowcharts, and systems.
- **Argumentation 6.B:** Support a claim with evidence from biological principles, concepts, processes, and data.
- **Argumentation 6.C:** Provide reasoning to justify a claim by connecting evidence to biological theories.

The Power of a Punch

Driving Question: *How can we use our knowledge of force and motion to design equipment that prevents boxing injuries?*

Summary: Science meets safety. Students apply physics to redesign boxing gear and create safety guides that reduce impact and protect athletes from injury.

AP Physics 1 Science Practices:

- **Creating Representations 1.C:** Create qualitative sketches of graphs that represent features of a model or the behavior of a physical system.
- **Mathematical Routines 2.C:** Compare physical quantities between two or more scenarios or at different times and locations in a single scenario.
- **Scientific Questioning and Argumentation 3.A:** Create experimental procedures that are appropriate for a given scientific question.
- **Scientific Questioning and Argumentation 3.B:** Apply an appropriate law, definition, theoretical relationship, or model to make a claim.

*Project also covers learning objectives from Pre-AP Biology.

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TEACH™ Pre-AP Unit Overview

AP Skills & Practices Alignment

Social Studies Grade 6-7

A Story of the Inka*

Driving Question: *How can we propose a movie that tells a significant story from Inka history?*

Summary: Pitch the past! Students become screenwriters, crafting film proposals and storyboards that bring the Inka Empire to life with compelling stories and historical accuracy.

AP Human Geography Course Skills:

- **Concepts and Processes 1.B:** Explain geographic concepts, processes, models, and theories.
- **Concepts and Processes 1.D:** Describe a relevant geographic concept, process, model, or theory in a specified context.
- **Spatial Relationships 2.B:** Explain spatial relationships in a specified context or region of the world using geographic concepts, processes, models, or theories.

AP Historical Thinking Skills:

- **Contextualization 4.B:** Explain how a specific historical development or process is situated within a broader historical context.

Mali on the Mic*

Driving Question: *How can we create a podcast that sheds light on the Mali Empire?*

Summary: History you can hear. Students explore the rise of the Mali Empire and the role of oral tradition, then produce podcasts that bring its stories and significance to life.

AP Historical Thinking Skills:

- **Sourcing and Situation 2.C:** Explain the significance of a source's point of view, purpose, historical situation, and/or audience, including how these might limit the use(s) of a source.
- **Contextualization 4.A:** Identify and describe a historical context for a specific historical development or process.
- **Contextualization 4.B:** Explain how a specific historical development or process is situated within a broader historical context.
- **Argumentation 6.A:** Make a historically defensible claim.

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- **Argumentation 6.B:** Support an argument using specific and relevant evidence.
    - Describe specific examples of historically relevant evidence.
    - Explain how specific examples of historically relevant evidence support an argument.
- **Argumentation 6.C:** Use historical reasoning to explain relationships among pieces of historical evidence.

AP Human Geography Course Skills:

- **Concepts and Processes 1.D:** Describe a relevant geographic concept, process, model, or theory in a specified context.

Museum Makers: Classical China*

Driving Question: *How can we create a museum exhibit that explains the importance of the Han Dynasty?*

Summary: Bring history to life. Students explore the Han Dynasty by analyzing artifacts and creating museum exhibits that connect culture, economy, and society.

AP Historical Thinking Skills:

- **Developments and Processes 1.B:** Explain a historical concept, development, or process.
- **Contextualization 4.A:** Identify and describe a historical context for a specific historical development or process.
- **Making Connections 5.B:** Explain how a historical development or process relates to another historical development or process.
- **Argumentation 6.A:** Make a historically defensible claim.
- **Argumentation 6.B:** Support an argument using specific and relevant evidence.
- **Argumentation 6.C:** Use historical reasoning to explain relationships among pieces of historical evidence.

The Value of Water*

Driving Question: *How has water shaped civilizations?*

Summary: Follow the flow of history. Students explore how ancient civilizations used and valued water, then create collages and maps for a public art exhibit.

AP Historical Thinking Skills:

- **Contextualization 4.A:** Identify and describe a historical context for a specific historical development or process.
- **Contextualization 4.B:** Explain how a specific historical development or process is situated within a broader historical context.
- **Making Connections 5.A:** Identify patterns among or connections between historical developments and processes.
- **Argumentation 6.A:** Make a historically defensible claim.
- **Argumentation 6.B:** Support an argument using specific and relevant evidence.

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    - Describe specific examples of historically relevant evidence.
    - Explain how specific examples of historically relevant evidence support an argument.
- **Argumentation 6.C:** Use historical reasoning to explain relationships among pieces of historical evidence.

AP Human Geography Course Skills:

- **Spatial Relationships 2.D:** Explain the significance of geographic similarities and differences among different locations and/or at different times.

*Project also covers learning objectives from Pre-AP World History and Geography.

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Social Studies Grade 8

Reconstruction Scorecard*

Driving Question: *How can we assess the Reconstruction era: Did it live up to its ideals?*

Summary: History under review. Students investigate Reconstruction, assess how well its goals were met, and defend their conclusions based on historical evidence

AP Historical Thinking Skills:

- **Contextualization 4.A:** Identify and describe a historical context for a specific historical development or process.
- **Contextualization 4.B:** Explain how a specific historical development or process is situated within a broader historical context.
- **Making Connections 5.B:** Explain how a historical development or process relates to another historical development or process.
- **Argumentation 6.A:** Make a historically defensible claim.
- **Argumentation 6.B:** Support an argument using specific and relevant evidence.
    - Describe specific examples of historically relevant evidence.
    - Explain how specific examples of historically relevant evidence support an argument.
- **Argumentation 6.C:** Use historical reasoning to explain relationships among pieces of historical evidence.

Rethinking the Revolution*

Driving Question: *How was the American Revolution more complicated than "us versus them"?*

Summary: Revolution, reconsidered. Students debate a variety of perspectives from the American Revolution and create social media campaigns that amplify overlooked voices.

AP Historical Thinking Skills:

- **Sourcing and Situation 2.A:** Identify a source's point of view, purpose, historical situation, and/or audience.
- **Sourcing and Situation 2.B:** Explain the point of view, purpose, historical situation, and/or audience of a source.
- **Contextualization 4.A:** Identify and describe a historical context for a specific historical development or process.
- **Contextualization 4.B:** Explain how a specific historical development or process is situated within a broader historical context.
- **Argumentation 6.A:** Make a historically defensible claim.
- **Argumentation 6.B:** Support an argument using specific and relevant evidence.
- **Argumentation 6.C:** Use historical reasoning to explain relationships among pieces of historical evidence.

*Project also covers learning objectives from Pre-AP World History and Geography.

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