

Bureau of Adult Education  
Division of Career Technology & Adult Learning  
New Hampshire Department of Education  
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Concord, NH 03301

# Adult High School Competencies

For use by local adult high school programs



July, 2010

## **The NH Adult High School Competencies--Background information**

At the request of local directors of adult high school programs, the Bureau of Adult Education convened a group of experienced adult high school teachers to develop model competencies for frequently-offered classes.

The teachers, nominated by local directors because of their effectiveness in teaching adult high school students, met for two days. They reviewed state and local competencies from a variety of sources and decided that their mission would be to agree upon and publish clear general competencies and to make suggestions for assessment.

### **Implementation**

In New Hampshire, adult high school diplomas are granted by local school districts. Therefore, the adult high school competencies in this document are offered for the consideration of local adult education directors. These competencies may be adopted as written or changed as necessary to meet local requirements, or the local adult education program may adopt other competencies developed at the school district level.

The adult high school competency group developed competencies for the following classes: U. S. History, Civics, Economics, Algebra 1, and Biology. In addition, the English teacher group identified general competencies for reading, writing, speaking, and listening from which local programs can select appropriate competencies for specific classes.

### **Adult High School Competency Development Committee**

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## English Competencies

### Statement from the English competency committee:

Flexibility! It is recommended that Adult High School teachers offer multiple opportunities for students to meet the following competencies. For one (1) adult high school credit, a student must demonstrate or provide evidence that s/he has achieved a passing score in each competency. Teachers should align rubrics so that point values reflect district grading policy so that discrepancies between grades and competencies do not arise.

**KEY :**ADP= Adult Diploma Program E= English W= Writing, R= Reading, V= Viewing & Listening, S= Speaking # Indicate components under each competency.

### Writing Competency

#### ADP.E.W.1

Students will demonstrate an ability to write effectively for a variety of purposes and audiences.

##### 1.1

Students will use the writing process to generate, draft, edit (peer), revise, and publish writings for a variety of purposes (i.e. research, non-fiction, editorial, persuasive, creative, and/or narrative).

##### 1.2

Students will use self-management skills such as following timelines, organizing materials and time, applying constrictive feedback, and improving upon preexisting writing skills.

##### 1.3

Students will become articulate writers who engage in expansion, compression, and clarification of ideas by using appropriate supporting evidence, vocabulary, voice, and tone.

##### 1.4

Students will complete final product(s) that meet the individual expectation(s) for the assignment including (but not limited to): conventions, timeliness, professionalism, format, submission guidelines, and/or evidence of the writing process.

**Sample Assessments:** Writing Rubric Attached, next page.

**Sample Opportunities:** Essays, Research Papers, Journaling, Blogging, Creative Writing, Responses to Literature, Letters, Resumes, Email, Summaries, Short Answer, Editing,

**ADP WRITING RUBRIC Student-Friendly Version**

**ADP.E.W.1** Students will demonstrate an ability to write effectively for a variety of purposes and audiences.

	Exceeds	Meets	Approaches	Little Evidence
<b>WRITING PROCESS</b> <ul style="list-style-type: none"> <li>▪ Planning</li> <li>▪ Drafting</li> <li>▪ Editing/ Revision</li> <li>▪ Organization</li> <li>▪ Publishing</li> <li>▪ Timeliness</li> </ul>	<ul style="list-style-type: none"> <li>• Extensive brainstorming</li> <li>• Multiple drafts showing significant revisions</li> <li>• Elements submitted on or before deadline(s).</li> <li>• Perfectly Formatted</li> </ul>	<ul style="list-style-type: none"> <li>• Clear evidence of brainstorming</li> <li>• Clear evidence of drafting</li> <li>• Elements submitted on time.</li> <li>• Adequately Formatted</li> </ul>	<ul style="list-style-type: none"> <li>• Some evidence of brainstorming</li> <li>• Some evidence of drafting</li> <li>• Elements submitted</li> <li>• Some formatting issues</li> </ul>	<ul style="list-style-type: none"> <li>• Little or no brainstorming</li> <li>• Little or no evidence of drafting</li> <li>• Missing elements</li> <li>• Significant formatting issues</li> </ul>
<b>ORGANIZATION</b> <ul style="list-style-type: none"> <li>▪ Clear Focus</li> <li>▪ Introduction</li> <li>▪ Conclusion</li> <li>▪ Transitions</li> </ul>	<ul style="list-style-type: none"> <li>• Clear focus and direction</li> <li>• Strong, inviting introduction and satisfying conclusion</li> <li>• Smooth, effective transitions</li> </ul>	<ul style="list-style-type: none"> <li>• Clear focus with some inconsistencies</li> <li>• Developed introduction and conclusion</li> <li>• Evidence of transitions</li> </ul>	<ul style="list-style-type: none"> <li>• Lacks clear focus</li> <li>• Introduction and conclusion ineffective (e.g., "My topic is...", "In conclusion...")</li> <li>• Few effective transitions</li> </ul>	<ul style="list-style-type: none"> <li>• Lacks focus and structure</li> <li>• Missing or extremely undeveloped introduction and conclusion</li> <li>• Lack of transitions</li> </ul>
<b>IDEAS/DEVELOPMENT</b> <ul style="list-style-type: none"> <li>▪ Obvious main idea(s)</li> <li>▪ Supporting and relevant details</li> <li>▪ Writer understands task</li> <li>▪ Details well-suited to audience</li> <li>▪ Narrowed topic</li> </ul>	<ul style="list-style-type: none"> <li>• Main idea(s) stand out</li> <li>• Details carefully selected</li> <li>• Well-suited to audience and purpose</li> <li>• Thorough, balanced explanation/exploration of topic</li> </ul>	<ul style="list-style-type: none"> <li>• Clear main idea(s)</li> <li>• Supporting details are relevant, but not consistently well-chosen for audience and purpose</li> <li>• Topic is explained / explored</li> </ul>	<ul style="list-style-type: none"> <li>• Unclear purpose and main idea(s)</li> <li>• Irrelevant details or extensive repetition</li> <li>• Difficulties moving from general observations to specific details</li> </ul>	<ul style="list-style-type: none"> <li>• Lacks main idea</li> <li>• Minimal development</li> <li>• Off topic</li> <li>• Hard to follow</li> </ul>
<b>LANGUAGE USE/VOICE</b> <ul style="list-style-type: none"> <li>▪ Accurate vocabulary</li> <li>▪ Striking and varied word choice</li> <li>▪ Words evoke clear images</li> <li>▪ Strong sense of audience</li> <li>▪ Brings topic to life</li> </ul>	<ul style="list-style-type: none"> <li>• Rich, varied, or specific word choice, appropriately adjusted to subject and audience</li> <li>• Writing is expressive, engaging, or sincere</li> </ul>	<ul style="list-style-type: none"> <li>• Appropriate and functional word choice, adjusted to subject and audience</li> <li>• Writing is somewhat expressive, engaging, or sincere</li> </ul>	<ul style="list-style-type: none"> <li>• Repetitive and/or misused word choice, seldom adjusted to subject and audience</li> <li>• Writing is imprecise rather than vivid and specific</li> </ul>	<ul style="list-style-type: none"> <li>• Limited and vague word choice, not adjusted to subject and audience</li> <li>• Writing is lifeless and mechanical</li> </ul>
<b>SENTENCE FLUENCY</b> <ul style="list-style-type: none"> <li>▪ Sentences flow</li> <li>▪ Sentence variation (length and beginnings)</li> <li>▪ Control over sentence structure</li> </ul>	<ul style="list-style-type: none"> <li>• Effective sentence flow</li> <li>• Extensive variation in sentence structure, length, and beginnings</li> </ul>	<ul style="list-style-type: none"> <li>• Some sentence flow</li> <li>• Some variety in sentence structure, length, and beginnings</li> </ul>	<ul style="list-style-type: none"> <li>• Significant portion of text is difficult to follow</li> <li>• Sentence patterns are repetitive.</li> <li>• Sentences are awkward, choppy, or rambling</li> </ul>	<ul style="list-style-type: none"> <li>• Incomplete sentences make writing difficult to read aloud</li> <li>• Sentence structure frequently obscures meaning</li> </ul>
<b>CONVENTIONS/MECHANICS</b> <ul style="list-style-type: none"> <li>▪ Spelling</li> <li>▪ Paragraph indentation</li> <li>▪ Capitalization/punctuation</li> <li>▪ Grammar and usage</li> <li>▪ Editing – paper clean, edited, and polished</li> </ul>	<ul style="list-style-type: none"> <li>• Strong control of standard writing conventions</li> <li>• Errors do not distract from readability.</li> <li>• Little need for editing</li> </ul>	<ul style="list-style-type: none"> <li>• Adequate control of standard writing conventions</li> <li>• Minor errors - do not distract from readability.</li> <li>• Moderate need for editing</li> </ul>	<ul style="list-style-type: none"> <li>• Limited control of standard writing conventions</li> <li>• Errors begin to distract from readability.</li> <li>• Significant need for editing</li> </ul>	<ul style="list-style-type: none"> <li>• Numerous errors in usage, spelling, capitalization, and punctuation repeatedly distract the reader</li> <li>• Text difficult to read</li> </ul>

## Reading Competency

### **ADP.E.R.2**

Students will read various genres to demonstrate an ability to comprehend, evaluate, interpret, and recognize the value of the texts.

#### 2.1

Students will use pre-reading strategies to engage with the text.

#### 2.2

Students will connect text to historical and/or cultural influences.

#### 2.3

Students will connect text to self by using relevant and appropriate examples.

#### 2.4

Students will be able to identify elements of literature: character development, plot, theme, conflict, moral, setting, literary devices, figurative language, etc.

Samples of Assessments: Reading Logs, Response to Reading, Discussion, Literature Circles, Socratic Circles, Study Guide Questions, Tests & Quizzes, Vocabulary, Through Essays, Oral Reading, Multi-Genre (connect to other works), Book Reports

Reading Rubric Attached, next page.

**Sample Opportunities:** Classic Novels, Contemporary Books, Non-fiction, Plays, Short Stories, Newspapers & Magazine Articles, Poetry & Lyrics, Web Pages, Book Excerpts, Technical/Informational Reading,

**Sample Assignment:** EPA Clean Alternative Fuels (Read 2 pages/ Answer 10 questions) Page 20.

**ADP READING RUBRIC** Student-Friendly Version

**ADP.E.R.2** Students will read various genres to demonstrate an ability to comprehend, evaluate, interpret, and recognize the value of the texts.

	Exceeds	Meets	Approaches	Little Evidence
<u>PRE-READING STRATEGIES</u> <ul style="list-style-type: none"> <li>▪ Identify purpose</li> <li>▪ Preview</li> <li>▪ Make predictions</li> <li>▪ Activate Prior Knowledge</li> </ul>	<ul style="list-style-type: none"> <li>▪ Independently and consistently engages.</li> </ul>	<ul style="list-style-type: none"> <li>▪ Often engages</li> </ul>	<ul style="list-style-type: none"> <li>▪ Sometimes engages</li> </ul>	<ul style="list-style-type: none"> <li>▪ Rarely engages</li> <li>▪ Needs prompting</li> </ul>
<u>HISTORICAL/ CULTURAL CONNECTIONS</u> <ul style="list-style-type: none"> <li>▪ Influence of Author's background</li> <li>▪ Importance of setting</li> <li>▪ Importance of publication date</li> <li>▪ Significance of allusions</li> <li>▪ Connecting to societal issues</li> </ul>	<ul style="list-style-type: none"> <li>▪ Insightful Connections</li> </ul>	<ul style="list-style-type: none"> <li>▪ Thoughtful Connections</li> </ul>	<ul style="list-style-type: none"> <li>▪ Difficulty Connecting to specific details</li> </ul>	<ul style="list-style-type: none"> <li>▪ Unable to Connect to many or all details.</li> </ul>
<u>PERSONAL CONNECTIONS</u> <ul style="list-style-type: none"> <li>▪ Interpretation of morals</li> <li>▪ Relating to characters</li> <li>▪ Relating to experiences</li> <li>▪ Connecting to real-life</li> </ul>	<ul style="list-style-type: none"> <li>▪ Insightful Connections</li> </ul>	<ul style="list-style-type: none"> <li>▪ Thoughtful Connections</li> </ul>	<ul style="list-style-type: none"> <li>▪ Difficulty Connecting to specific details</li> </ul>	<ul style="list-style-type: none"> <li>▪ Unable to Connect to many or all details.</li> </ul>
<u>ELEMENTS OF LITERATURE</u> <ul style="list-style-type: none"> <li>▪ character development</li> <li>▪ plot</li> <li>▪ theme</li> <li>▪ conflict</li> <li>▪ moral</li> <li>▪ setting</li> <li>▪ literary devices</li> <li>▪ figurative language</li> <li>▪ others by instructor discretion</li> </ul>	<ul style="list-style-type: none"> <li>▪ Explain and/or identify all elements accurately and thoroughly.</li> </ul>	<ul style="list-style-type: none"> <li>▪ Identify most elements accurately.</li> </ul>	<ul style="list-style-type: none"> <li>▪ Identify some elements accurately.</li> </ul>	<ul style="list-style-type: none"> <li>▪ Unable to identify most elements accurately.</li> </ul>

## Viewing & Listening Competency

**ADP.E.V.3** Students will demonstrate efficient viewing and/or listening skills.

3.1

Students will use details from the presentation to construct a response that demonstrates engagement in the activity.

3.2

Students will select and use appropriate listening/ viewing strategies.

3.3

Students will be respectful and actively engaged during the presentation.

**Samples of Assessments:** Following Written & Oral Instructions, Taking Two-Column Notes, Participating in Class Discussions, Filling in Venn diagrams, Answering Viewing Questions, Completing Fill-in-the-blank Notes, Composing Thoughtful Reactions, Writing in Journals, Completing Web Hunts, Responding to Electronic Documents (Email, Blogs, Documents).

Inference Notes Graphic Organizer Attached, Page 22

**Sample Opportunities:** Lecture, Instruction, Audio & Video Clips (Podcasts, Movie clips, Instructional Videos, Audio Books, Music), Guest Speakers, Peer Presentations, Recitations

## Speaking Competency

### ADP.E.S.4

Students will demonstrate the ability to speak purposefully and articulately.

#### 4.1

Students will use verbal discussions with other to clarify ideas, solve problems, make decisions, debate issues, and/or extend understanding.

#### 4.2

Students will communicate effectively by using techniques of public speaking (e.g., eye contact, gestures, visual aides, speaking from notes, vocal techniques[volume, stress, enunciation], and audience awareness).

#### 4.3

Students will build upon previous discourse, respect the viewpoints of others, and conform to communication etiquette.

**Sample Assessments:** Belmont Rubric for Oral Presentations Attached, page 23

**Sample Opportunities:** Discussion, Presentations, Interviewing, Conferencing, Collaborative Group, Small Group Discussions, Public Speaking, Formal Speeches, Audio/ Video Recordings, Performances, Reading Aloud

## US History Competencies

Assessments must meet performance levels as set by local programs. Students must minimally meet the requirements for level 2 proficiency.

**ADP.SS.H.1 - Competency 1:** Students will demonstrate an understanding of the evolution of colonialism from its inception in North America through the two wars of American independence.

- **ADP.SS.H.1.1** – Colonies.
- **ADP.SS.H.1.2** – Relations with Native Americans
- **ADP.SS.H.1.3** – American Revolutionary War
- **ADP.SS.H.1.4** – War of 1812

**Suggested Assessments:** Lecture, discussion, graphic organizer, and comparison of English, French, and Spanish colonies; projects and presentation on colonization as well as the movement toward and causes the American Revolution; creation of alternate colonies and history; projects; tests; or presentations

**ADP.SS.H.2 - Competency 2:** Students will demonstrate an understanding of the Constitution through an examination of federalism, the duties of each branch of government and the evolution of Civil Rights.

- **ADP.SS.H.2.1** – Federalism
- **ADP.SS.H.2.2** – Branches of the government
- **ADP.SS.H.2.3** – Evolution of Civil Rights through the Bill of Rights

**Suggested Assessments:** Student projects and presentations which is to include student-generated handouts to be filled in by students during the presentation; discussion of the legitimacy of government; creating an alternate constitution and compare to the actual U.S. Constitution; projects; tests; or presentations

**ADP.SS.H.3 - Competency 3:** Students will demonstrate an understanding of the Monroe Doctrine and Manifest Destiny.

- **ADP.SS.H.3.1** – Monroe Doctrine
- **ADP.SS.H.3.2** – Manifest Destiny
- **ADP.SS.H.3.3** – Trail of Tears
- **ADP.SS.H.3.4** – Mexican War

**Suggested Assessments:** comic book or story board or monopoly-based game focused on the Texas Revolution, Trail of Tears, Mexican War, Oregon, from trail to statehood; song writing; projects; tests; or presentations

**ADP.SS.H.4 - Competency 4:** Students will demonstrate an understanding the concepts of slavery, racism, the Civil War and Reconstruction, the impact of the 13<sup>th</sup>, 14<sup>th</sup>, and 15<sup>th</sup> amendments, the rise of Jim Crow laws and segregation, including Plessy vs. Ferguson.

- **ADP.SS.H.4.1** – Slavery and racism
- **ADP.SS.H.4.2** – The Civil War
- **ADP.SS.H.4.3** – Reconstruction and the rise of Jim Crow
- **ADP.SS.H.4.4** – Constitutional amendments

**Suggested Assessments:** a competition between 2 sides the class (North and South) on various aspects o the Civil War from the point of view of their geo-political area; Lecture / discussion with guided notes on Reconstruction and the rise of Jim Crow; Lecture / discussion on the Civil Rights movement and its continuing impact today; Race to Freedom movie; Glory movie, and evaluate the significance; board games; projects; tests; or presentations

**ADP.SS.H.5 - Competency 5:** Students will demonstrate an understanding of the impact of the first and second industrial revolutions, the evolution of American capitalism, the effects of waves on immigrants on the economy, the process of citizenship and the effects of ethnocentrism on new immigrants, present citizens and the country as a whole.

- **ADP.SS.H.5.1** – First and second industrial revolutions
- **ADP.SS.H.5.2** – Evolution of American capitalism
- **ADP.SS.H.5.3** – Immigration and the process of citizenship

**Suggested Assessments:** viewing of “The Huddled Masses” from the “America” series, including guide note-taking; taking and discussing the N.Y. Times citizenship test (access online); read an excerpt of “The Jungle”; negotiating for a job under the rules and unrestricted capitalism in the post Civil War era; examination of panics and depressions including world of 1929 and 2008 and an evaluation of the New Deal policies for efficacy, regional impact and constitutionalism; projects; tests; or presentations

**ADP.SS.H.6 - Competency 6:** Students will demonstrate an understanding of jingoism, global conflict and transformation and the evolution of war through the Spanish-American War, World War I, and the Fourteen Points

- **ADP.SS.H.6.1** – Global conflicts
- **ADP.SS.H.6.2** – Jingoism and isolationism
- **ADP.SS.H.6.3** – The Fourteen Points

**Suggested Assessments:** The Spanish-American war movie; “All Quiet on the Western Front” movie; write a letter home as a soldier on the Western Front; projects; tests; or presentations

**ADP.SS.H.7 - Competency 7:** Students will demonstrate an understanding of the Civil Rights movements (women, African-Americans, Native-Americans, and other minority groups) and immigrant rights / non-immigrant rights.

- **ADP.SS.H.7.1** - Women's movements
- **ADP.SS.H.7.2** - Civil Rights in the 1960s
- **ADP.SS.H.7.3** – Immigrant rights

**Suggested Assessments:** Debates between Civil Rights figures such as Malcolm X and Dr. Martin Luther King; women's protest movements and signs; "Eyes on the Prize" clips; projects; tests; or presentations

**ADP.SS.H.8 - Competency 8:** Students will demonstrate an understanding of global intervention through World War II, Cold War (Korea, Vietnam), Persian Gulf, Iraq and Afghanistan.

- **ADP.SS.H.8.1** – World War II
- **ADP.SS.H.8.2** – Cold War conflicts and the collapse of communism
- **ADP.SS.H.8.3** – Iraq and Afghanistan

**Suggested Assessments:** D-Day landing from "Saving Private Ryan"; online video content; oral history components with former soldiers; guest speakers; Vietnam protest signs; music; "Charlie Wilson's War"; "The Things They Carry"; projects; tests; or presentations

## Economics Competencies

**ADP.SS.E.1 - Competency 1:** Students will demonstrate an understanding of foundations of economics through money as a medium of exchange, economic factors of production, types of economic systems (capitalism, socialism, and communism) and trade offs.

- **ADP.SS.E.1.1** – Economic production factors
- **ADP.SS.E.1.2** – Trade offs
- **ADP.SS.E.1.3** – Capitalism and other economic systems

**Suggested Assessments:** graphic organizers of capitalism / socialism / communism systems; discussion of trade-offs; examination of wants and needs; projects; tests; or presentations

**ADP.SS.E.2 - Competency 2:** Students will demonstrate an understanding of consumerism through the examination of personal finance, career choices, debt, bankruptcy, credit worthiness, saving and investment vehicles, stock market, and banking.

- **ADP.SS.E.2.1** – Consumerism
- **ADP.SS.E.2.2** – Personal finance
- **ADP.SS.E.2.3** – Debt and bankruptcy
- **ADP.SS.E.2.4** – Career choice

**Suggested Assessments:** comparison shopping at a grocery store; graphs; design a personal budget; select a career, and see if it matches; projects; tests; or presentations

**ADP.SS.E.3 - Competency 3:** Students will demonstrate an understanding of markets and business competition through supply and demand, types of business organizations, monopolies and competitions, and business ethics.

- **ADP.SS.E.3.1** – Characteristics of money
- **ADP.SS.E.3.2** – Stock market
- **ADP.SS.E.3.3** – Investment and savings
- **ADP.SS.E.3.4** – Supply and demand

**Suggested Assessments:** play Monopoly, Life, Maxibourse; online stock-trading simulations; yahoo finances; projects; tests; or presentations

**ADP.SS.E.4 - Competency 4:** Students will demonstrate an understanding of the Nation's economy through financing and producing of goods, marketing and distribution, the American labor force, unemployment, the business cycle, economic indicators, Federal Reserve system, government taxation, inflation, and recession.

- **ADP.SS.E.4.1** – Business organizations, competition, and monopolies
- **ADP.SS.E.4.2** – Financing, production, marketing, and distribution of goods.
- **ADP.SS.E.4.3** – The American labor force, unemployment, business ethics
- **ADP.SS.E.4.4** – The business cycle, including recession and inflation.
- **ADP.SS.E.4.5** – Federal Reserve system
- **ADP.SS.E.4.6** – Government taxation.

**Suggested Assessments:** play Monopoly; activity using paychecks such as % of taxes, mandatory withholding; “Wall Street” movie; projects; tests; or presentations

**ADP.SS.E.5 - Competency 5:** Students will demonstrate an understanding of the global economy through balance of trade, responsibility of the developed nations toward less and least developed countries, allocation of resources, business ethics, and cybernomics.

- **ADP.SS.E.5.1** – International trade
- **ADP.SS.E.5.2** – Developed and developing nations
- **ADP.SS.E.5.3** – Cybernomics
- **ADP.SS.E.5.4** – Business ethics
- **ADP.SS.E.5.5** – Global integration

**Suggested Assessments:** “Gungho” movie; play Risk' graphic organizers; maps; pros and cons; projects; tests; or presentations

## Civics Competencies

**ADP.SS.C.1 – Competency 1:** Students will demonstrate an understanding of the nature and purpose of government through structures and functions, rules and laws, interpretation of government, and legitimate authority.

- **ADP.SS.C.1.1** – Structures and function of government
- **ADP.SS.C.1.2** – Rules and laws
- **ADP.SS.C.1.3** – Interpretation of government
- **ADP.SS.C.1.4** – Legitimate authority

**Suggested Assessments:** Creating their own laws; use of different philosophers to see if their ideas correlate' Schoolhouse Rock clips; essay on whose theory of government do you agree with; projects; tests; or presentations

**ADP.SS.C.2 – Competency 2:** Students will demonstrate an understanding of the structure and function of government through fundamental ideals and principles, state and federal constitutions as living documents, judicial systems, and ideals of democracy.

- **ADP.SS.C.2.1** – Fundamental ideals and principles
- **ADP.SS.C.2.2** – The Constitution as a living document
- **ADP.SS.C.2.3** – Ideals of democracy

**Suggested Assessments:** Create your own government; create your own constitution; look at constitutional cases; projects; tests; or presentations

**ADP.SS.C.3 – Competency 3:** Students will demonstrate an understanding of the rights and responsibilities of citizens through the political process, knowledgeable and engaged citizens, and individual rights.

- **ADP.SS.C.3.1** – Political process.
- **ADP.SS.C.3.2** - Knowledgeable and engaged citizens.
- **ADP.SS.C.3.3** – Individual rights and responsibilities.

**Suggested Assessments:** discussion of political parties; survey to determine which political parties are supported and why; election projects; game Road to the White House; scenarios of being arrested, legitimate or not and why; projects; tests

## Algebra 1 Competencies

### **ADP. M. A. 1 Basic Skills**

The students will be able to perform basic arithmetic skills including:

- Whole Numbers
- Integers
- Decimals
- Fractions
- Ratio, Proportion, Rates, and Unit Rates
- Percents
- Order of Operations
- Rate of Change
- Graphing using the Cartesian Coordinate Plane

**Assessments:** Quiz per topic.  
Test upon completion of the competency.

### **ADP. M. A. 2 The Language of Algebra**

The students will show understanding of the vocabulary specific to Algebra.

- Terms to be included:
- Absolute Value
- Associative Property
- Commutative Property
- Distributive Property
- Equation
- Equivalent
- Evaluate
- Exponent
- Inequality
- Integers
- Irrational
- Like Terms
- Linear equations
- Monomial
- Polynomial
- Radical
- Rational
- Real numbers
- Simplify

Assessment may be included in all tests and quizzes.

**ADP. M. A. 3      Solving Equations**

The students will be able to manipulate Algebraic Expressions and Equations.

Students will:

- Use the Associative, Communative, and Distributive Property to simplify Algebraic expressions.
- Solve linear equations:
  - One step
  - Two step
  - Multi-step
- Equations with the variable on both sides of the equal sign.
- Manipulate literal equations
- Solve inequalities.

**Assessment:**      Quizzes upon the completion of each topic.  
Test at the completion of the competency.

**ADP. M. A. 4      Problem Solving**

The students will solve problems using the appropriate algebraic reasoning strategies.

The student will:

- Identify the variable.
- Write the equation (formula).
- Identify any known values.
- Rewrite the formula substituting the known values.
- Solve for the unknown.
- Check the answer for credibility and accuracy.

**Assessment:**      This can be addressed as a single unit or can be incorporated into the other assessments.

**Final Assessment:** A final exam covering the course in its entirety.

## Biology Competencies

### **ADP.B.1. Students will understand that living organisms are made of cells which provide structure and function.**

- B1.1. Distinguish between a plant and animal cell, providing multiple examples
- B1.2. Identify the interrelationships between at least four cell organelles
- B1.3. Illustrate and describe the process of cell division
- B1.4. Outline how a protein is produced

(Sample rubric with identifying proficiencies attached. )

### **ADP.B.2. Students will understand that living organisms require energy transformations that enable cellular activity.**

- B2.1. Trace carbohydrate synthesis to carbohydrate metabolism
- B2.2. Identify multiple applications where ATP is used in a cell
- B2.3. Distinguish between cell respiration and fermentation

### **ADP.B.3. Students will understand that living organisms contain DNA which provides information for inheritable characteristics and genetic variation.**

- B3.1. Distinguish between a chromosome, a gene, and DNA molecule
- B3.2. Solve inheritance problems (Punnet Squares)
- B3.3. Explain the difference between selective breeding and genetic engineering

### **ADP.B.4. Students will understand that living organisms must respond to both their internal cellular requirements and to their external environment.**

- B4.1. Define the concept of homeostasis
- B4.2. Describe an application of homeostasis in a living organism
- B4.3. Distinguish between biotic and abiotic influences in the survival of a living organism

### **ADP.B.5. Students will use technology for biological observations, measurements, and data analysis.**

- B5.1. Correctly read measurement tools and use measurement units
- B5.2. Adjust a microscope and successfully view a specimen
- B5.3. Utilize computer software to properly enter data and make a graph
- B5.4. Utilize a computer to write a lab report (following designated format)

**Assessment Rubric (example for Competency ADP.B.1.):**

<u>PROFICIENCIES</u>	<u>EXCEED</u>	<u>MEET</u>	<u>APPROACH</u>	<u>LITTLE OR NONE</u>
a. Distinguish between plant & animal cells, provide multiple examples				
b. Identify interrelationships between cell organelles				
c. Illustrate & describe the process of cell division				
d. Outline how a protein is made				

The New Hampshire Adult High School Competency Development Committee recommends that all adult high school classes consider the following self management competencies as expectations for all students.

### **Self Management Expectations for Adult High School Students**

(adapted from the New Hampshire Department of Education competency-based performance standards, May 8, 2003)

Students in all adult high school classes are expected to demonstrate the ability to...

- Attend class regularly and on time.
- Adhere to regulations in school and classroom settings.
- Keep track of class assignments.
- Complete assignments and projects on time.
- Follow through on commitments.
  
- Listen to staff members and other students when they are speaking.
- Ask appropriate questions.
- Show respect for others and their points of view.
- Respond positively to constructive feedback.
  
- Adapt as necessary to create a positive outcome for self and others.
- Advocate appropriately for themselves.



United States  
Environmental Protection  
Agency

Transportation and Air Quality  
Transportation and Regional  
Programs Division

EPA420-F-00-034  
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As they travel from house to house, meter readers for public utility company Virginia Power are enjoying quiet, clean rides in their EVs. The company's 17 EV pickup trucks can travel 50 miles on a single battery charge.

The utility began purchasing EVs in 1993 to test and promote their use. As an electricity provider, EVs make good business sense to Virginia Power. But the company also is interested in cutting U.S. dependence on foreign oil and promoting a cleaner, more energy-efficient technology.

For more information on Virginia Power's fleet of EVs, contact Arlie Hahn at (804) 257-4008.

# Clean Alternative Fuels: Electric Vehicles

One in a series of fact sheets



**M**ore than 4,000 electric vehicles (EVs) are traveling U.S. roads and highways. Although some EVs are found nationwide, California has the greatest concentration of the alternative fuel vehicles. EVs do not produce tailpipe emissions, but generators producing the electricity used to charge EV batteries do emit pollutants.

Electricity for EVs is produced by power plants, which send it to substations through transmission lines and then to homes and businesses through distribution systems. An EV's electric motor converts electricity—usually from a battery pack—into mechanical power that runs the vehicle. After a certain vehicle driving range, however, EV batteries must be recharged.

## AVAILABILITY

Several major auto manufacturers are producing high-performance EVs, including passenger cars, minivans, sport utility vehicles, pickup trucks, and buses.

Homes, government facilities, and businesses must have adequate capacity for vehicle recharging, however, and special outlet hookups or upgrades may be required. In California and Arizona, some shopping malls, grocery stores, hotels, and banks have chargers in place to fuel electric vehicles.

Auto manufacturers also are beginning to sell "hybrid" vehicles that combine an electric motor with a separate gasoline or diesel engine. Hybrid vehicles can more than double the gas mileage of conventional gasoline- or diesel-powered cars and can cut emissions significantly. Hybrid vehicles do not require the use of recharging stations.

## EV BATTERY TYPES



The following types of batteries have the potential to power electric vehicles:

- **Lead-Acid**—Provides a low-cost, low-range (less than 100 miles) option with a 3-year life cycle.
- **Nickel-Metal Hydride**—Offers a greater driving range and life cycle, but is currently more expensive than lead-acid batteries.
- **Nickel-Cadmium**—Offers a range of 100 miles, a long life, and faster recharges than lead-acid batteries, but is more expensive and has lower peak power and recharging efficiency.
- **Lithium-Ion**—Offers the potential for a long driving range and life cycle, but is currently very costly.
- **Zinc-Air**—Currently under development. Provides superior performance compared to current battery technology.
- **Flywheels**—Currently under development. Could be capable of storing a larger amount of energy in smaller, lighter weight systems than chemical batteries.

**AFFORDABILITY**

At \$15,000 to \$40,000, EVs cost more than comparable, mass-produced vehicles. Some manufacturers lease EVs to minimize maintenance costs and potential risks such as lower resale values associated with the new technology. To encourage EV purchases, some government agencies offer incentives to offset the higher initial costs. For example, the federal government provides a tax credit equal to 10 percent (up to \$4,000) of the purchase cost of an EV. Some states offer partial sales tax exemptions, one-time income tax credits, or reduced license and registration fees.

EV purchase prices can potentially be offset by lower “fuel” and maintenance costs. The average monthly electricity cost for a typical EV driver is less than \$15, compared to \$50 for gasoline. If EV’s are recharged overnight, off-peak rates can decrease the cost of powering the vehicles. EVs also have lower maintenance costs because they have fewer moving parts than internal combustion engines and do not require tune-ups or oil changes. One obstacle to affordability, however, is that EVs’ lead-acid batteries must be replaced every 3 years at a cost of approximately \$8,000.

**PERFORMANCE**

Testing has demonstrated that EV acceleration, speed, and

handling can equal or exceed that of conventional vehicles. EVs are also more energy efficient and produce less noise than gasoline- or diesel-powered vehicles, particularly in stop-and-go traffic, because the engine does not run if the car is not moving.

Currently, a large drawback is that the driving range of EVs is much less than that for gasoline- or diesel-powered vehicles. Depending on battery type, climate, and terrain, an EV can travel from 40 to 120 miles on a single battery charge. There are also space considerations with EVs because their batteries can be large and heavy, resulting in less room for cargo or passengers.

**SAFETY**

EVs must meet the same safety standards as conventional vehicles. In some instances, research shows that EVs are safer than gasoline-powered vehicles. EVs usually have lower centers of gravity—making them less likely to roll over in an accident. The danger of fire in a collision is also substantially reduced because EVs do not have a gas tank or reservoir of engine lubricating oil. As with conventional vehicles, however, EV batteries contain toxic elements that raise battery production, transport, use, and disposal safety issues.

**MAINTENANCE**

EVs do not require tune-ups or oil changes associated with conventional vehicles. In addition, EVs do not have timing belts, water pumps, radiators, fuel injectors, or tailpipes to replace. Battery recharging can be a frequent and lengthy process, however, taking 4 to 14 hours depending on the battery type and the voltage level used in recharging. High-voltage, fast-charging units (which take approximately 10 to 20 minutes to change) are under development. Currently, they are being designed for limited use by some fleet operators and public charging locations.

**For More Information**

EPA Alternative Fuels Web Site  
[www.epa.gov/otaq/consumer/fuels/altfuels/altfuels.htm](http://www.epa.gov/otaq/consumer/fuels/altfuels/altfuels.htm)

Electric Vehicle Association of the Americas  
 701 Pennsylvania Avenue, NW  
 Fourth Floor  
 Washington, DC 20004  
 Phone: 202 508-5995  
 Fax: 202 508-5924  
 Web site: [www.evaa.org](http://www.evaa.org)

Alternative Fuel Refueling Station Locator  
 Web site: [www.afdcmap.nrel.gov/nrel](http://www.afdcmap.nrel.gov/nrel)

Alternative Fuel Data Center  
 Web site: [www.afdc.nrel.gov](http://www.afdc.nrel.gov)  
 National Alternative fuels Hotline  
 Phone: 800 423-1DOE

**Electric Cars: Reading Test****Reading Questions:**

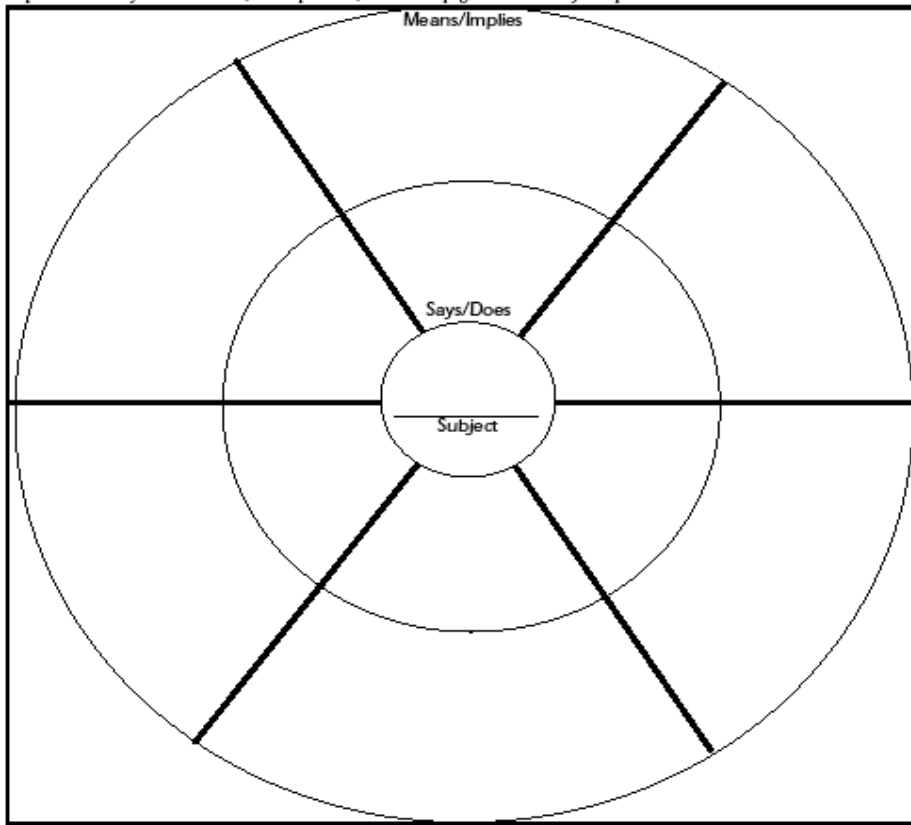
*Directions: Answer each questions. Answer in complete and detailed sentences on your own paper.*

1. Who created this document? How might this influence the content?
2. When did Virginia Power start using Electric Vehicles for meter reading? Why? (List 2-3 reasons).
3. List the six (6) types of batteries used in Electric Vehicles. Which would you choose? Why?
4. What is one issue regarding E.V. batteries? What solution has been devised by car companies to address this issue?
5. Even though Electric Vehicles are more expensive than traditional cars, what are some of the ways listed to offset the cost? (List 3-5)
6. List the two performance issues addressed. Which concerns you more? Why?
7. While EVs do not use as much fossil fuel, they can still be harmful to the environment. Explain how.
8. What maintenance issues can be avoided by switching to an Electric Vehicle? (List 2-3)
9. How would you locate an Alternative Fueling Station? (Be specific)
10. Would you consider an EV for your next car? Why? Why not?

## Inference Notes

Name	Date
Subject	Period

Directions: Find six quotes or examples that reveal important or different aspects of your subject. Then in the outer strand, explain what they mean. Be sure, when possible, to include page citations for your quotes.



**Making Inferences:** Using the notes from your target, draw some conclusions about your subject. If you are writing about a fictional character, for example, explain what kind of person they are. Be sure to use *direct quotations* and citation information (e.g., I, II, 35-40) when supporting your analysis.

### Rubric for Oral Presentations

Criteria	Exceeds	Meets	Has not met
<b>Nonverbal Skills</b>			
<b>Eye contact</b>	Constantly looks at someone or some groups at all times	Occasionally looks at someone or some groups during presentation	Only focuses attention to one particular part of the class, does not scan audience <b>OR</b> Does not attempt to look at audience at all, reads notes the entire time.
<b>Facial Expressions</b>	Gives audience clues to what the content of speech is about; appropriate expression, no deadpan or conflicting expressions.	Occasionally demonstrates either a deadpan <b>OR</b> conflicting expression during presentation.	Occasionally displays both a deadpan and conflicting expression during presentation <b>OR</b> Has either a deadpan expression or shows a conflicting expression during entire presentation.
<b>Gestures</b>	Natural hand gestures are demonstrated.	Some natural hand gestures are demonstrated.	No gestures are noticed.
<b>Posture</b>	Stands up straight with both feet on the ground.	Occasionally slumps during presentation.	Sits during presentation or slumps.
<b>Vocal Skills</b>			
<b>Enthusiasm</b>	Demonstrates a strong positive feeling about topic during entire presentation.	Occasionally shows positive feelings about topic.	Shows some negativity toward topic presented <b>OR</b> Shows absolutely no interest in topic presented.
<b>Vocalized Pauses (uh, well uh, um)</b>	No vocalized pauses noticed.	1-5 are noticed.	6 or more are noticed.
<b>Content</b>			
<b>Topic Announced</b>	Clearly explains what the report is covering.	Explains what the report is covering.	Vaguely tells audience what report is covering <b>OR</b> audience has no idea what the report is on.
<b>Time Frame</b>	Presentation falls within required time frame.	Presentation falls within required time frames; but some sections are rushed or dragged out.	Presentation is more than maximum time <b>OR</b> Presentation is less than minimum time.
<b>Visual Aid</b>	Visual aid enhances presentation, all thoughts articulated and keeps interest.	Thoughts articulated clearly, but not engaging.	Poor, distracts audience and is hard to read <b>OR</b> Adds nothing to presentation.
<b>Completeness of content</b>	Thoroughly explains all points.	Majority of points covered in depth, some glossed over.	One or more points left out <b>OR</b> Majority of points glossed over.
<b>Professionalism of Presentation</b>	Presentation is organized; interest level of the audience is maintained.	Thoughts articulated clearly, though does not engage audience.	Thoughts don't flow, not clear, does not engage audience <b>OR</b> Mumbles, audience has difficulty hearing, confusing.

*from Belmont High School English Department Curriculum*

