

# Renaissance Essential Learnings

Essential learnings represent skills and knowledge that all Renaissance graduates will acquire.

## **RA Humanities: Writing (overarching learnings for all subjects)**

- 1) I can write and revise in a variety of modes (narrative, expository, persuasive, descriptive/creative, correspondence).
- 2) I can craft logical, coherent paragraphs (each with a topic sentence and multiple supporting details).
- 3) I can write using varied sentence structures, including accurately crafted simple and compound sentences.
- 4) I can write in a logically organized manner, using transitions to facilitate logic and flow.
- 5) I can write purposefully for the intended audience.
- 6) I can accurately use MLA format and documentation.

## **RA Humanities: Reading (overarching learnings for all subjects)**

- 1) I can demonstrate understanding of informational and literary texts using a variety of reading strategies.
- 2) I can interpret the author's meaning, arguments, and themes using elements of the text.
- 3) I can analyze and evaluate informational and literary text for point of view and purpose.
- 4) I can identify and use structural features of written documents (such as tables of contents, charts, graphs, and glossaries) to obtain information.
- 5) I can understand and follow written directions.
- 6) I can increase vocabulary comprehension, using understanding of denotative/connotative meanings, word origins, and context clues.

## **RA Humanities: Communication (overarching learnings for all subjects)**

- 1) I can be a prepared, cooperative, and contributing participant in various types of group discussions.
- 2) I can express my position on diverse topics using credible evidence and maintaining respectful interactions.
- 3) I can demonstrate clear reasoning and argument, addressing all possible perspectives, in discussions and presentations.
- 4) I can present clearly developed information to engage and inform, using a variety of media as well as personal presentation skills and techniques.
- 5) I can listen to and evaluate presentations, recognizing main ideas, omissions, and point of view.

## **RA Math (overarching learnings for all subjects)**

- 1) I can make sense of problems and persevere in solving them.
- 2) I can reason abstractly and quantitatively.
- 3) I can construct viable mathematical arguments and critique the reasoning of others.
- 4) I can model the real world with math.
- 5) I can use the appropriate tools strategically.
- 6) I can attend to precision in solving problems and communicating my ideas.
- 7) I can find and make use of structure.
- 8) I can find and express regularity in repeated reasoning.

## **RA Science (overarching learnings for all subjects)**

- 1) I can observe & classify patterns.
- 2) I can evaluate cause and effect.
- 3) I can correctly measure and understand quantity, unit & proportion.
- 4) I can analyze and build systems and system models.
- 5) I can correlate energy and matter.
- 6) I can identify structure and how it determines function.
- 7) I can recognize stability and change.

## **RA Humanities: Social Science (overarching learnings for all subjects)**

- 1) I can demonstrate that the past, present, future are connected; humans seek to understand the past to inform decision making in the present and plan for the future.
- 2) I can analyze interactions; contacts among and within groups result in both conflicts and cooperation, often leading to changes.
- 3) I can explain that people's movement across the earth and how the decisions they make cause events to happen locally, regionally and nationally.
- 4) I can make connections between the various social studies disciplines -- political, social, economic, historical, geographical and psychological.
- 5) I can compare and contrast continuity and change in organizations and cultures.
- 6) I can analyze the multiple causes and effects of events for insights into patterns of decision making.
- 7) I can identify patterns and processes of human actions and natural forces; their effects can repeat and develop in predictable or unpredictable patterns.
- 8) I can evaluate the use of evidence and recognize that the choice of evidence and data can influence interpretations of the past and the present.

## **RA Wellness (overarching learnings for all subjects)**

- 1) I can implement practices designed to promote healthful nutrition.
- 2) I can implement practices designed to improve my mental, social and emotional health.
- 3) I can implement a plan of physical activity designed to promote health.

# **Renaissance Subject Area Essential Learnings**

## **RA Science: Physics**

- 1) I can read and interpret motion graphs.
- 2) I can solve kinematic equation problems for motion in one and two dimensions.
- 3) I can apply Newton's Laws of motion to moving and static objects.
- 4) I can use the law of conservation of momentum to solve and interpret collisions and impulses, and the forces involved in each.
- 5) I can explain the law of conservation of energy and use it to solve for potential forces and kinetic energy.
- 6) I can use the properties of thermodynamics to determine the final temperature of combined substances and the energy required for phase changes.
- 7) I can use the properties of harmonic motion to solve for frequency, period, energy, and wave speed in waves, springs, and pendulums.
- 8) I can read circuit diagrams and solve for voltage and current at specific on a circuit.

## **RA Science: Chemistry**

- 1) I can describe matter according to chemical and physical properties and classify matter as a type of pure substance or mixture.
- 2) I can interpret models that serve to explain the structure and function of the atom and sub-atomic particles.
- 3) I can explain the components and trends of The Periodic Table.
- 4) I can correctly name compounds and write formulas for ionic and covalent compounds.
- 5) I can balance chemical equations, determine reaction rates, and identify limiting reactants.
- 6) I can apply the Law of Conservation of Mass and use dimensional analysis to balance equations and solve problems.
- 7) I can use Kinetic Molecular Theory to describe the behavior of gas, and solve problems using gas laws and explain the relationship of the variables.

## **RA Math: Algebra I**

- 1) I can simplify algebraic expressions.
- 2) I can solve equations and inequalities.
- 3) I can interpret data using statistics.
- 4) I can display functions as tables, mappings and graphs.
- 5) I can graph linear equations and linear inequalities.
- 6) I can solve systems of equations.
- 7) I can simplify polynomial expressions.
- 8) I can solve quadratic equations.

## **RA Math: Geometry**

- 1) I can identify and find the measures of complementary, supplementary, vertical, adjacent and congruent angles.
- 2) I can classify polygons, and find measures of missing parts.
- 3) I can recognize similar and congruent shapes, and find measures of missing parts.
- 4) I can find the perimeter and area of triangles, squares, rectangles, parallelograms and trapezoids.
- 5) I can identify the parts of a circle, and find the circumference and area.
- 6) I can find missing parts of right triangles using Trigonometry (triangle measure) and the Pythagorean Theorem.
- 7) I can find the volume and surface area of three-dimensional objects.
- 8) I can find the probability of simple and compound events.

## **RA Math: Algebra II**

- 1) I can solve real-world problems by using trigonometry.
- 2) I can simplify rational expressions using techniques of polynomials.
- 3) I can solve equations involving radicals and represent the answers in simplest form.
- 4) I can solve real-world problems by using quadratic equations.
- 5) I can combine and evaluate functions using the correct notation.
- 6) I can solve real-world problems by using exponential and logarithmic functions.

## Renaissance Habits of Mind (overarching learnings for all subjects)

<b>Renaissance Academy Habits of Mind Rubric</b>			
<b>Habit of Mind</b>	<b>DESCRIPTION</b>	<b>Teacher – Rate your student 1-4</b>	<b>Student – Rate Yourself 1-4</b>
Analysis / Problem solving	The student uses various resources and strategies to successfully find a connection and/or a solution. Seeks teacher help when needed.		
Proof / Evidence / Argumentation	The student utilizes recognized forms of reasoning to construct arguments based on available evidence to explain and support perspectives on a topic or issue. When challenged, the student logically refutes or accepts critiques.		
Self – monitoring / Persistence	The student sets clear goals, establishes an organized plan, works diligently, and never gives up.		
Flexibility / Empathy	The student is able to see things from many points of view, generate alternatives, and consider many options.		
Striving for Precision & Accuracy	The student works toward high standards, revising and reworking, striving for constant improvement.		
Curiosity	The student is constantly seeking deeper understanding, is always asking why, and is unwilling to accept an easy answer.		
Creativity	The student is willing to step outside their comfort zone, to take a risk on trying new things, and generate work unique to them.		

## Renaissance Criteria for Success (overarching learnings for all subjects)

<b>Criteria for Success</b>						
	<b>Always</b>	<b>Sometimes</b>	<b>Rarely</b>	<b>Never</b>	<b>Teacher Evaluation</b>	<b>Self Evaluation</b>
<b>Participation</b> <i>(Appendix A)</i>	The student's participation meets classroom expectations.	With some exceptions, the student's participation meets classroom expectations.	With help or prodding, the student's participation meets classroom expectations.	Even with help or prodding, the student's participation does not meet classroom expectations.	Comments:	Comments:
<b>Work Completion</b> <i>(Appendix B)</i>	The student hands in work on time and meets all academic expectations.	With some exceptions, the student hands in work on time and meets academic expectations.	With help or prodding, the student hands in work on time and meets academic expectations.	Even with help or prodding, the student does not hand in work on time or meet academic expectations.	Comments:	Comments:
<b>Behavior</b> <i>(Appendix C)</i>	The student's behavior follows all classroom rules and procedures specific to the classroom and the school.	With some exceptions, the student's behavior follows classroom rules and procedures specific to the classroom and the school.	With help or prodding, the student's behavior follows classroom rules and procedures specific to the classroom and the school.	Even with help or prodding, the student's behavior does not follow classroom rules or procedures specific to the classroom and the school.	Comments:	Comments:
<b>Working In Groups</b> <i>(Appendix D)</i>	In groups, the student exhibits group maintenance and interpersonal skills that have been identified by the teacher.	With some exceptions, the student exhibits group maintenance and interpersonal skills that have been identified.	With help or prodding, the student exhibits group maintenance and interpersonal skills that have been identified.	Even with help or prodding, the student does not exhibit group maintenance and interpersonal skills that have been identified.	Comments:	Comments: