

Preparing for Tomorrow: Known and Unknown

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| Computer Science | |
| Computational Thinking | |
| L1:CT.3 | Demonstrate how a string of bits can be used to represent alphanumeric information. |
| Collaboration | |
| L1:CL.2 | Use online resources (e.g., email, online discussions, collaborative web environments) to participate in collaborative problem-solving activities for the purpose of developing solutions or products. |
| Computing Practice & Programming | |
| L1:CPP.5 | Construct a program as a set of step-by-step instructions to be acted out (e.g., make a peanut butter and jelly sandwich activity). |
| Computers and Communications Devices | |
| L1:CD.6 | Recognize that computers model intelligent behavior (as found in robotics, speech and language recognition, and computer animation). |
| Community Global, and Ethical Impacts | |
| L1:CI.2 | Identify the impact of technology (e.g., social networking, cyber bullying, mobile computing and communication, web technologies, cyber security, and virtualization) on personal life and society. |
| English Language Arts | |
| Reading: Literature | |
| CCSS.ELA-LITERACY.RL.1 | Cite textual evidence to support analysis of what the text says explicitly as well as inferences drawn from the text. |
| CCSS.ELA-LITERACY.RL.10 | By the end of the year, read and comprehend literature, including stories, dramas, and poems, in the grades 6-8 text complexity band proficiently, with scaffolding as needed at the high end of the range. |
| Reading: Informational Text | |
| CCSS.ELA-LITERACY.RI.1 | Cite textual evidence to support analysis of what the text says explicitly as well as inferences drawn from the text. |
| Writing | |
| CCSS.ELA-LITERACY.W.2 | Write informative/explanatory texts to examine a topic and convey ideas, concepts, and information through the selection, organization, and analysis of relevant content. |
| Speaking & Listening | |
| CCSS.ELA-LITERACY.SL.2 | Interpret information presented in diverse media and formats (e.g., visually, quantitatively, orally) and explain how it contributes to a topic, text, or issue under study. |
| Language | |
| CCSS.ELA-LITERACY.L.2 | Demonstrate command of the conventions of standard English capitalization, punctuation, and spelling when writing. |
| Writing in Science & Technical Subjects | |
| CCSS.ELA-LITERACY.WHS T.2 | Write informative/explanatory texts, including the narration of historical events, scientific procedures/ experiments, or technical processes. |
| Fine Arts | |
| Creating | |
| MA:Cr2.1 | Organize, propose, and evaluate artistic ideas, plans, prototypes, and production processes for media arts productions, considering purposeful intent. |

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| MA:Cr3.1 | a. Experiment with multiple approaches to produce content and components for determined purpose and meaning in media arts productions, utilizing a range of associated principles, such as point of view and perspective. b. Appraise how elements and components can be altered for intentional effects and audience, and refine media artworks to reflect purpose and audience. |
| VA:Cr1.1 | a. Combine concepts collaboratively to generate innovative ideas for creating art. b. Formulate an artistic investigation of personally relevant content for creating art. |
| Performing/Presenting/Producing | |
| MU:Pr6.1 | a Perform the music with technical accuracy to convey the creator's intent. b Demonstrate performance decorum (such as stage presence, attire, and behavior) and audience etiquette appropriate for venue and purpose. |
| TH:Pr6.1 | a. Adapt a drama/theatre work and present it informally for an audience. |
| Responding | |
| DA:Re9.1 | a. Discuss the characteristics and artistic intent of a dance from a genre, style, or cultural movement practice and develop artistic criteria to critique the dance using genre-specific dance terminology |
| MA:Re9.1 | Determine and apply specific criteria to evaluate various media artworks and production processes, considering context and practicing constructive feedback. |
| TH:Re9.1 | a. Use supporting evidence and criteria to evaluate drama/theatre work. b. Apply the production elements used in a drama/theatre work to assess aesthetic choices. c. Identify a specific audience or purpose for a drama/theatre work. |
| Connecting | |
| VA:Cn10.1 | Generate a collection of ideas reflecting current interests and concerns that could be investigated in art-making. |
| Mathematics | |
| Expressions and Equations | |
| CCSS.MATH.CO NTENT.6.EE.B.6 | Use variables to represent numbers and write expressions when solving a real-world or mathematical problem; understand that a variable can represent an unknown number, or, depending on the purpose at hand, any number in a specified set. |
| CCSS.MATH.CO NTENT.6.EE.B.7 | Solve real-world and mathematical problems by writing and solving equations of the form $x + p = q$ and $px = q$ for cases in which p , q and x are all nonnegative rational numbers. |
| CCSS.MATH.CO NTENT.6.EE.B.8 | Write an inequality of the form $x > c$ or $x < c$ to represent a constraint or condition in a real-world or mathematical problem. Recognize that inequalities of the form $x > c$ or $x < c$ have infinitely many solutions; represent solutions of such inequalities on number line diagrams. |
| CCSS.MATH.CO NTENT.6.EE.C.9 | Use variables to represent two quantities in a real-world problem that change in relationship to one another; write an equation to express one quantity, thought of as the dependent variable, in terms of the other quantity, thought of as the independent variable. Analyze the relationship between the dependent and independent variables using graphs and tables, and relate these to the equation. |

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| Physical Education and Health | |
| Motor Skills and Movement | |
| S1.M22 | Demonstrates correct technique for basic skills in 1 self-selected outdoor activity. |
| S1.M24 | Demonstrates correct technique for basic skills in at least 2 self-selected outdoor activities |
| Movement and Performance | |
| S2.M4 | Reduces open space on defense by making the body larger and reducing passing angles. |
| S2.M5 | Reduces open space by not allowing the catch (denial) or by allowing the catch but not the return pass. |
| S2.M6 | Transitions from offense to defense or defense to offense by recovering quickly. |
| Health Enhancement & Fitness | |
| S3.M1 | Is able to identify 3 influences on physical activity (e.g., school, family & peers; community & built environment; policy). |
| S3.M2 | Participates in self-selected physical activity outside of physical education class. |
| S3.M5 | Participates in a variety of lifetime recreational team sports, outdoor pursuits or dance activities. |
| Personal and Social Behavior | |
| S4.M4 | Accepts differences among classmates in physical development, maturation and varying skill levels by providing encouragement and positive feedback. |
| Value of Physical Activity | |
| S5.M3 | Recognizes individual challenges and copes in a positive way, such as extending effort, asking for help or feedback and/or modifying the tasks. |
| Science | |
| Physical Sciences | |
| PS1-4 | Develop a model that predicts and describes changes in particle motion, temperature, and state of a pure substance when thermal energy is added or removed. |
| PS1-5 | Develop and use a model to describe how the total number of atoms does not change in a chemical reaction and thus mass is conserved. |
| PS1-6 | Undertake a design project to construct, test, and modify a device that either releases or absorbs thermal energy by chemical processes |
| English/Science Connections | |
| CCSS.ELA-LITERACY.RST.1.0 | By the end of grade 8, read and comprehend science/technical texts in the grades 6-8 text complexity band independently and proficiently. |
| Social/Emotional Learning | |
| Relationship Skills | |
| 1C.a | Set a short-term goal and make a plan for achieving it. |
| Social Studies | |
| Economics and Financial Literacy | |
| NSS-E.3A | Know: Banks and other financial institutions loan funds received from depositors to borrowers; Part of the interest received from these loans is used to pay interest to depositors for the use of their money. Draw and label a diagram showing the role that financial institutions play in channeling funds from savers to borrowers. Conduct research into the interest rate paid on savings and charged for loans by financial institutions in their community and create a classroom bulletin board summarizing their findings. |

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| NSS-E.3B | Know: For the saver, an interest rate is the price a financial institution pays for using a saver's money and is normally expressed as an annual percentage of the amount saved. Define an interest rate as the price paid for using someone else's money, expressed as a percentage of the amount saved. |
| NSS-E.3C | Know: Interest rates paid on savings and charged on loans, like all prices, are determined in a market. Explain why banks that experience an increase in the number of people who want loans may decide to pay higher interest rates on deposits. |
| NSS-E.3D | Know: When interest rates increase, people earn more on their savings and their savings grow more quickly. Calculate the total amount of interest earned on two certificates of deposit—one with a higher rate of interest than the other—and explain how the certificate of deposit with the higher interest rate can help a saver reach his or her savings goal faster. |
| NSS-E.3E | Know: Principal is the initial amount of money upon which interest is paid. Differentiate between principal and interest. |
| NSS-E.3F | Know: Compound interest is the interest that is earned not only on the principal but also on the interest already earned. Use the Rule of 72 to determine the number of years it will take for their savings to double in value. Using a formula for compound interest, calculate how much two different savers, one who starts to save at age 21 and one who starts to save at age 35, will have at retirement. |
| NSS-E.3G | Know: The value of a person's savings in the future is determined by the amount saved and the interest rate; The earlier people begin to save, the more savings they will be able to accumulate, all other things equal, as a result of the power of compound interest. Predict which of two individuals will have more in savings for retirement when one individual has saved \$2,000 a year for the last 15 years before retirement and the other has saved \$1,000 a year for last 30 years before retirement, assuming each earns the same rate of interest. |
| English/Social Studies Connections | |
| CCSS.ELA-LITERACY.RH.1 0 | By the end of grade 8, read and comprehend history/social studies texts in the grades 6-8 text complexity band independently and proficiently. |