

Seventh Grade Critical Learning Targets

JC McKenna Middle School

Welcome to 7th grade! Because we believe strongly in the importance of the home/school connection, this brochure was created for parents/guardians to outline what your student will be learning this year. In this document, you will find the Critical Learning Targets (CLTs) for each of the subjects taught at the seventh grade level at J.C. McKenna. Though other topics will be explored and further skills developed, the CLTs are the key academic concepts for this year.

Please contact any of your student's teachers with any questions regarding the CLTs.
Working together, we can make this a highly successful academic year for your student!

By the end of 7th grade, your student will be able to...

Math

- Use variables to represent quantities in expressions, equations, and inequalities.
- Identify and use the order of operations.
- Identify and use scale factor to solve problems involving geometric figures.
- Use volume and surface area of three-dimensional objects to solve real-world problems.
- Decide whether two quantities are in a proportional relationship.
- Compare populations and data using both measures of center (e.g. mean, median) and measures of variability (e.g. range).
- Find and explain the probabilities of both simple and compound events.
- Add, subtract, multiply and divide rational numbers (e.g. decimals,

fractions, integers) using previous understandings and properties of

operations.

- Solve real-world and mathematical problems with positive and negative rational numbers.



High Math

- Identify and use squares, square roots, cubes and cube roots.
- Perform operations using scientific notation.
- Graph, compare, and interpret both linear and non-linear functions.
- Derive, use, and interpret the equation $y=mx+b$ for linear relationships.
- Identify and interpret the rate of change and initial value of functions from descriptions, coordinates, equations, linear models, tables and graphs.
- Solve one variable equations.
- Describe the effect of transformations (translations, rotations, reflections, and dilations) using coordinates.
- Explain the difference between rational and irrational numbers.
- Apply the Pythagorean Theorem.

Science

- Understand and apply methods used to complete science problems.
- Describe factors that all living things possess.
 - Understand the major life processes of: photosynthesis, diffusion, osmosis, respiration and fermentation.
 - Describe the basic elements of the theory of Evolution. Give examples of Evolution occurring today.
 - Tell the functions of the parts of a cell.
 - Be able to solve basic Mendellian Genetics problems.
 - Recognize and describe three major inheritance patterns.
 - Give examples of genetics affecting our lives.
 - Describe the major elements of mechanical and electromagnetic waves.
 - Understand the workings of the Human Nervous System.



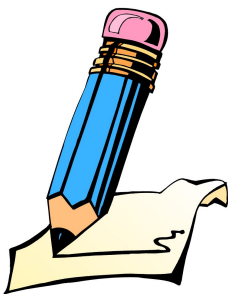
World History

- Describe how the physical geography of a place - its land and climate affects the development of its civilization.
- Implement important map skills including: using map legends, scales and keys; describing locations using cardinal directions; describing the movement of people, ideas, diseases and products; and gathering geographical information about a place.
- Compare and contrast: tell the similarities and differences between cultures and groups within cultures.
- Cause and effect: describe the relationship between events and how they have influenced the past and the present.
- Identify the aspects that make a culture a civilization.
- Interpret the past by using a variety of sources such as biographies, journals, artifacts, artwork, and other primary source materials.
- Point of view: explain how one's perspective may cause events to be interpreted differently.
- Identify types of government: aristocracy, tyranny, direct democracy, dictatorship, republic, monarchy.
- Identify significant discoveries and innovations and describe their effect on today's society.
- Identify major events and people in world history.



Composition/Literature

- Cite several pieces of textual evidence to support analysis of what the text says explicitly and to support inferences drawn from the text.
- Determine themes or two or more central ideas in a text, analyzing the development over the course of the text.
 - Provide an objective summary for literature and informational text.
 - Determine meaning of words and phrases, including figurative, connotative and technical meanings.
 - Write arguments to support claims with clear reasons and relevant evidence.
 - Develop informative/explanatory topics with relevant facts, definitions, concrete details, quotations, or other information and examples.



- Write narratives about real or imagined experiences that engage the reader by establishing a context and point of view and introducing a narrator and/or characters.
- Develop and strengthen writing as needed by planning, revising, editing, rewriting, or trying a new approach, focusing on how well purpose and audience have been addressed.
- Use technology, including the Internet, to produce and publish writing, link to and cite sources.
- Conduct short research projects to answer a question, drawing on several sources and generating additional related, focused questions for further research and investigation.
- Engage effectively in range of collaborative discussions on grade 7 topics, texts, and issues, building on others' ideas and expressing their own clearly.
- Present claims and findings, emphasizing points in a focused manner with descriptions, facts, details, and examples.
- Demonstrate command of conventions of standard English grammar and usage when writing or speaking.

Spanish

- Describe themselves and others in simple sentences (using pronouns and adjectives) in Spanish.
- Talk about their likes and dislikes (activities, foods) in Spanish.
- Tell where they go and when in Spanish.
- Describe how they feel in Spanish.
- Hold a short conversation in Spanish about their interests and preferences with a partner.
- Write a paragraph in Spanish telling about themselves in simple sentences.
- Conjugate –ar and –er verbs.
- Conjugate and apply the verbs ir, tener, ser, and estar.



Art



- Develop the sensitivity, understanding, and insight to produce artwork that is personally meaningful and creatively expressive through the exploration of media and techniques.
- Learn and discuss the origins of specific artists and images.
- Examine and interpret the compositions of artwork and their meaning.
- View and identify the characteristics of artworks in different eras and cultures.
- Develop a critical appreciation of historical and contemporary art.

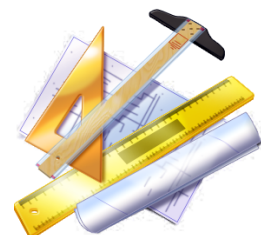
Technology Education

- Explain the relationship between science, technology, engineering and math. (STEM)
- Describe engineering and explain how engineers participate in or contribute to the invention and innovation of products.
- Learn the steps of the design process and how to use the design process to solve problems.
- Practice using historical and current techniques for measuring

in both metric and customary systems, including using

precision measuring tools.

- Identify and create thumbnail, perspective, isometric, and orthographic sketches and dimension them properly.
- Use Autodesk Inventor® to learn how to create 3D models.



- Complete all steps of the design process solving the Pegboard

Design Problem.

Family & Consumer Education

- Demonstrate teamwork and leadership skills and abilities in school settings.
- Apply planning skills and processes to organize tasks and responsibilities.
- Demonstrate safe food handling and preparation.
- Demonstrate ability to read and understand technical directions.
- Demonstrate ability to select, store, prepare, and serve nutritious foods.
- Demonstrate skills in using a variety of equipment, tools, and supplies for apparel and textile construction.



Physical Education

- Develop the physical skills needed to enjoy participation and physical activities.
- Develop and refine increasingly complex forms in the basic skills of specialized sport.
- Use their minds to control, understand, and enhance motor skill acquisition and performance.
- Identify principles of practice and conditioning that enhance movement performance.
- Set physical activity goals independently and participate in individualized programs based on personal goals and interests.
- Participate regularly in moderate to vigorous physical activities in both school and non-school settings.
- Acquire a greater understanding of fitness components and the importance of each to their overall fitness.
- Identify the purpose of rules and procedures and practice appropriate problem solving techniques to resolve conflicts in competitive activities.
- Develop respect for individuals with similarities and differences while participating in physical activity.
- Seek out physically active experiences for group membership, social interaction, self-expression, and enjoyment..
- Develop self-confidence and promote a positive self-image.



Band



- Play a varied repertoire of music on instruments both alone and with others.
- Perform an appropriate part in an ensemble.
- Blend instrumental timbre, matching dynamics and responding to the cue of the conductor.
- Sight read accurately and expressively.
- Use the scale structure and interval relationships to understand three major scales.
- Demonstrate an extensive knowledge of the technical vocabulary of music.

- Perform with a clear, full tone and play their instrument with technical efficiency as it applies to their respective instrument.
- Identify their band music according to the corresponding historical period.
- Apply the elements of music in large group ensemble to band music to produce a final product that correctly matches the intent of the conductor.
- Evaluate a performance within specific guidelines, describing the musical elements observed.

Chorus

- Sing SA and SAB choral arrangements with expression and technical accuracy.
- Be introduced to solo ensemble music– Class C Level.
- Understand and model the importance of vocal health.
- Show respect for the singing efforts of others in rehearsals and performances.
- Read and notate rhythms.
- Follow the musical director's conducting cues.
- Continue to site-read music; same pitches, step and skip using interval vocabulary (2nd, 4th, octave, etc.)
- Develop a repertoire of choral music representing diverse styles and cultures.
- Identify and apply musical signs, symbols and terms and use appropriate terminology.
- Develop an understanding of music in relation to culture, history, and other units of study.



General Music

- Explore the history of music from around the world.
- Play syncopated rhythms on a drum with technical accuracy.
- Improvise on a variety of instruments.
- Compose advanced melodies and rhythms.
- Explore how music adds depth to characters, stories, and movies.

Library Media

- Continue to monitor personal library account by renewing own materials and placing holds on books from this and other district libraries.
- Continue to conduct keyword searches using databases and search engines.
- Locate resources in the library for personal and classroom use.
- Select fiction and non-fiction materials appropriate for independent reading using different strategies.
- Become familiar with different fiction genres available.
- Continue to evaluate sources of information.
- Continue to develop note-taking strategies utilizing online bibliography tools.
- Continue to cite print and non-print media sources and learn to use an online bibliography tool.
- Use technology to interact and collaborate with others.
- Create a product based on a research or inquiry activity.



Ways to Help your Student Be Successful

- Be aware of grade level Critical Learning Targets.
- Promote a positive attitude toward learning and school.
- Determine a location and time for your student to study and complete homework each night.
- Make sure your student attends school and arrives on time!
- Communicate with your student and his/her teachers.
- Encourage your student to be involved in school and community activities.
- Encourage healthy nutrition and sleep habits.