

INSTANT MESSAGE: Text Messages That Make A Difference

Preparing for college is vital to the success of **EVERY** student. Not all of you will directly enter college upon graduation, but **EVERY** student should be prepared to enter college or vocational training at the time of their own choosing. Therefore, the Arcadia Valley Career Technology Center supports this educational mission by sharing the following research-based standards that **ALL** students should meet while in high school, and prior to entering the Career Technology Center, in your individual plan of study.



There are three main areas you should be concerned with to enhance your educational, vocational and intellectual success. These areas relate to preparation in mathematics, science and the development of quality communication skills.

In each of these areas there are multiple indicators you can use to measure your success in preparing for a trade / technical / liberal arts college education, a high-wage employment, or military service. The direction taken is not nearly as important as the foundation received while completing your high school graduation requirements.

The following are content-specific readiness indicators that you must meet to ensure you have the essential foundation for academic and vocational success.

SCIENCE:

Earth/Space Science:

1. Describe processes that alter Earth's surface.
2. Know that rocks and fossils provide important evidence of how the physical earth and biological systems have changed over long periods of time.
3. Describe the position and movement of the major bodies of the solar system and current scientific theories of their origin.
4. Describe causes of weather events and changes in climate.
5. Describe the water cycle.



Physical Science:

6. Explain that all substances (matter) are arrangements of a small number of elements.
7. Distinguish between physical and chemical changes.
8. Understand that energy exists in different forms, can be transformed, and is neither created nor destroyed.
9. Describe sound and light in terms of properties of waves.
10. Describe the relationship between forces and motion with regard to Newton's laws.

Life Science:

11. Describe the parts and systems of living things and relate them to need, function and classification.
12. Recognize that the traits of an individual organism are a combination of inherited traits and acquired traits.
13. Identify both adaptation and natural selection as processes that have resulted in the diversity of plant and animal life.
14. Describe relationships in ecosystems among organisms and between organisms and their environments.

Source: ***Getting Students Ready for College Preparatory/Honors Science: What Middle Grade Students Need To Know And Be Able To Do.*** Southern Regional Education Board.

COMMUNICATION SKILLS:

Language:

1. Develop vocabulary appropriate to reading, writing and speaking proficiency.

Reading Comprehension:

2. Summarize, paraphrase and categorize information.
3. Compare and contrast information, ideas and structures to clarify meaning of various materials.
4. Make inferences and predictions.
5. Connect what is read to personal experience and the world beyond the classroom.
6. Identify and interpret literacy structures, elements, devices and themes.

Writing:

7. Use an appropriate process to prepare to write.
8. Compose writing that conveys a clear main point with logical support.
9. Edit and revise writing for the strongest effect.
10. Use English language structure and grammar appropriately to communicate effectively.

Research:

11. Use research skills to locate, gather, evaluate and organize information for different purposes.

Speaking:

12. Use appropriate organization, language, voice, delivery style and visual aids to match the audience and purpose of oral presentations.

Listening:

13. Use active listening strategies to organize and respond to information presented in different formats for different purposes.



Source: ***Getting Students Ready for College Preparatory/Honors English: What Middle Grade Students Need To Know And Be Able To Do.*** Southern Regional Education Board.

MATHEMATICS:

1. Read, write, compare, order and represent in a variety of forms:



- integers, fractions, decimals, percents, and numbers written in scientific and exponential form.
2. Compute (add, subtract, multiply and divide) fluently with integers, fractions, decimals, percents, and numbers written in scientific notation and exponential form, with and without technology.
 3. Determine the greatest common factor, least common multiple and prime factorization of numbers.
 4. Write and use ratios, rates and proportions to describe situations and solve problems.
 5. Draw with appropriate tools and classify different types of geometric figures using their properties.
 6. Measure length with appropriate tools and find perimeter, area, surface area and volume using appropriate units, techniques, formulas and levels of accuracy.
 7. Understand and use the Pythagorean relationship to solve problems.
 8. Gather, organize, display and interpret data.
 9. Determine the number of ways events can occur and the associated possibilities.
 10. Write, simplify and solve algebraic equations using substitution, the order of operations, the properties of operations and the properties of equality.
 11. Represent, analyze, extend and generalize a variety of patterns.
 12. Understand and represent functions algebraically and graphically.

Source: ***Getting Students Ready for Algebra I: What Middle Grade Students Need To Know And Be Able To Do.***
Southern Regional Education Board.

Programs Available At Arcadia Valley Career Technology Center:

Automotive Technologies
Automotive Collision and Repair
**Building and Grounds
Maintenance**
Business Services
**Computer Networking and
Repair**
Graphic Communication Arts
Health Sciences
**Preparing for the Teaching
Profession**
Welding Technologies

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Why Do I Have To Learn This?



**Understanding How Course
Content and Real-World
Applications Can Shape
Your Future Success**