School is out, but learning continues!

GRADE 9

ACADEMIC ENRICHMENT

Clayton County Public Schools

DR. MORCEASE J. BEASLEY
Superintendent of Schools

DR. EBONY T. LEE
Director of Curriculum, Instruction, & Assessment

Dear Parents,

We want your child to be well prepared for the demands of the Georgia Milestones Assessment System (GMAS) which measures college and career readiness. The Department of Curriculum, Instruction, and Assessment is providing academic enrichment tasks for students to complete during the break to support and reinforce their learning. The assignments focus on writing because students are required to write in every subject area, and the Georgia Milestones requires students to respond in writing to several questions in English language arts and mathematics.

Assignments will be provided for students in grades 3-8 and high school tested courses in the areas of English language arts, mathematics, science, and social studies. Students are encouraged to read and complete the assignments during the break. Students can bring their finished work to school in order for teachers to review and support their areas of need.

Parents are encouraged to assist students with the completion of tasks as needed. Parents may consider having a scheduled day and/or time during the break for students to work on the assignments. Additionally, parents can engage students in conversations about their learning. An electronic version of the enrichment packets can be found on the Clayton County Public Schools website (www.clayton.k12.ga.us) and through the CCPS mobile app.

Finally, you will find additional resources on the Clayton County Public Schools website, including the Georgia Milestones Assessment Study/Resource Guides for Students and Parents. This resource includes test-taking tips and sample questions for English language arts, mathematics, science, and social studies, which will provide students with additional practice. To support students in the primary grade levels, the District has developed a "100 Wonderful Words That Work" interactive workbook that can be used daily to develop students' vocabulary and career awareness. This workbook can be accessed at: https://tinyurl.com/100-Wonderful . We highly encourage you to use these resources to support your child's readiness.

We encourage you to visit www.gadoe.org website where you can find additional information on Georgia Milestones, including a helpful video that explains the purpose for the testing system.

Thank you for your attention to this matter, and best wishes for the success of our children!

Regards,

Dr. Ebony T. Lee
Director of Curriculum, Instruction, & Assessment

English Literature and Composition

Standard: **ELACC9-10W1--**Write arguments to support claims in an analysis of substantive topics or texts, using valid reasoning and relevant and sufficient evidence.

Write an informational essay in your own words explaining the relationship between clothing styles and developments in clothing creation.

Before you begin planning and writing, you will read two texts and answer one question about what you have read.

These are the titles of the texts you will read:
1. Ready-Made Clothing
2. Tailoring
As you read the texts, think about what details from the texts you might use in your informational essay.

Think about ideas, facts, definitions, details, and other information and examples you want to use. Think about how you will introduce your topic and what the main topic will be for each paragraph. Develop your ideas clearly and use your own words, except when quoting directly from the source texts. Be sure to identify the sources by title or number when using details or facts directly from the sources.
Be sure to:
• Use information from the two texts so that your essay includes important details.
• Introduce the topic clearly, provide a focus, and organize information in a way that makes sense.
• Develop the topic with facts, definitions, details, quotations, or other information and examples related to the topic.
• Use appropriate and varied transitions to create cohesion.
• Clarify the relationship among ideas and concepts.
• Use clear language and vocabulary to inform about the topic.
• Provide a conclusion that follows the information presented.
• Check your work for correct grammar, usage, capitalization, spelling, and punctuation.

Ready-Made Clothing
by National Institute of Standards and Technology

Before the American Civil War, ready-made apparel existed but its variety was limited. Coats, jackets and undergarments were only available in predetermined sizes. Most clothing was made by tailors, by individuals, or by their family members at home. The Civil War was a pivotal event in the historical development of men's ready-made clothing. At the outset of the Civil War, most uniforms were custom-made in workers' homes under government contract. As the war continued, however, manufacturers started to build factories that could quickly and efficiently meet the growing demands of the military. These factories were able to make uniforms for a fraction of the cost of home sewers. Mass-producing uniforms necessitated the development of standard sizes. Measurements taken of soldiers revealed that certain sets of measurements tended to recur with predictable regularity. There were certain ratios of shoulder to waist measurements that occurred more frequently than others. After the war, these measurements were used to create the first commercial sizing scales for men. Today these ratios persist in names of fits and cuts in men's suits, shirts, and denim jeans. A men's store might offer a slim fit, a classic fit and a relaxed fit to suit various tastes and body types.
The mass production of women's clothing developed more slowly. Women's outfits were generally custom-made well into the 1920s. At that point a number of factors came together to contribute to the success of the women's ready-made apparel industry. New industrial production techniques were developed, driving supply, and the advertising industry rose in prominence, driving sales. Most importantly, demand was created in the form of the rising urban professional class. Single and married women found themselves in new relationships to domestic life, work life, and fashion. Many spent less time in the home and all associated hand-made clothes with an older, more rural lifestyle.

They no longer shopped at the town's general store for bolts of calico fabric. Chain stores and mail order catalogs offered multiple ways to access the new clothes. Ready-made articles of clothing were portrayed as modern and fashionable, if not sturdy. The new consumer industries were rapidly redefining the way Americans viewed mass-manufactured goods. The purchase of mass-produced clothing was sometimes seen as a loss of individuality. However, American women began to accept ready-made merchandise as convenient and affordable. They were up-to-date fashion items that could be easily replaced as styles changed. Making clothes more quickly meant styles did change more frequently as well. It took far less time for a designer to sketch a pattern and have an item made than ever before. However, the new ready-made clothing often fit poorly. A tailor might take two dozen measurements when making a men's suit. For example, determining the distance from the base of the neck to the middle of the shoulders is critical for an exact fit. Women's clothes are less straightforward and early male pattern makers did not know where to begin. Each manufacturer created its own unique and sometimes arbitrary sizing system. These systems were based on inaccurate body data or no body data at all. Different manufacturers frequently labeled garments of widely different dimensions the same size. This situation resulted in additional expenses for alterations. It also meant large volumes of returned merchandise. This meant more work for the consumer or tailor and for shop clerks and mail-order catalogues. It also meant overall increased costs for the consumer of ready-to-wear clothing. It was not until 1937 that the U.S. Department of Agriculture considered conducting a study of women's body measurements. They helped to create a standardized sizing system the entire industry could follow. Not all modern companies follow the same size chart but nearly all have standardized which types of measurements determine their sizes. If a woman knows just three measurements she can order from almost any retailer in the world.

"Ready-Made Clothing" adapted from "Standardization of Women's Clothing: Short History of Ready-Made Clothing" by National Institute of Standards and Technology, at http://museum.nist.gov/exhibits/apparel/history.htm.

Tailoring

Clothes before the Industrial Revolution were made and worn very differently than they are now. For the most part, families made their own clothing by hand from fabric they made or purchased locally. Fabric was intricate and time-consuming to make. As a result it was a highly prized commodity. Merchants made their wealth in transporting fine fabrics and threads. In places like Scotland, fabrics called tartans showed clan affiliation. Polynesians spent hours beating plant fibers and tree bark into tapa cloth. For Hawaiians, part of this practice took on religious significance and was conducted in sacred spaces. Before mass production, fabric itself—the finished product as well as the process—could be very meaningful. While time, effort, and money were put into making or obtaining fabric, creating a garment was much less complicated. Almost every culture had some version of a tied robe or tunic—essentially, a loose fabric that draped and was secured by a belt, pin, or sash. In the Middle Ages such ties and belts helped Europeans to keep improperly fitted clothes secure on their bodies. Most clothes, especially those of the lower and middle classes, would be considered very oversized by modern standards. They were generally made out of one or two pieces of cloth to minimize waste.

With the Renaissance's changes in art and society came more fitted clothes. These garments were made by sewing several pieces of fabric together. The wealthy had clothes made by tailors, who often customized their own patterns. But without closures like zippers and buttons, people often had to be sewn into their clothes! Laces and corsets eventually solved some of these problems, but it was still incredibly difficult to get dressed back then. By the 17th century, crafting and tailoring of Western clothing required more and more skill as designs became more complex. Intricate scenes of animals or flowers were embroidered by hand. They took hours to complete and were a sign of the wearer's wealth. Gemstones might be sewn onto the collar or sleeve of a very fine garment. A fine cloth was only as good as its cut and decoration and a man or woman could make their fortune on the strength of these designs. At the height of the 18th century, French fashion garments were truly works of art. They took days and dozens of hands to complete, with each person contributing hours of specialized skill. The materials themselves came from miles away; some (like silk) even came from other countries!

Eventually political and social movements led to much more restrained and practical clothing. As embellishments and flashy fabrics fell out of use even among aristocrats, fit became increasingly more important in the 19th and 20th

centuries. Instead of voluminous tunics or pants that tied, men began to wear suits. While suspenders were used for many years, pants had to fit accurately. Women wore trimmer dresses with buttons that allowed for more fitted looks. They put aside petticoats meant to give skirts more volume and many favored flowing looks over corseted ones. Clothing became a natural extension of the body rather than its decoration or disguise. Countries like England became renowned for their tailors and the wealthy traveled to have their clothes made. Tailoring was still expensive and not an option for all. Making a single coat might require several trips to the tailor, difficult for those who lived far away. The wealthy could travel into town or across provinces to attend several fittings a month. It was much less expensive to make clothing in the home and, if you could afford it, have a tailor help with the more complicated portions. Most often family members were each other's tailors, pinning and hemming in the home. While simple fabrics were much less expensive than before, clothes were still altered, mended, and handed down as children grew. Clothing was still not seen as replaceable or disposable. Eventually ready-made clothing would be available, but that brought its own set of problems. It would be several decades until fitted, comfortable clothing was truly affordable.

Standards:

MCC9-12.A.CED.1: Create equations and inequalities in one variable and use them to solve problems. Include equations arising from linear and quadratic functions, and simple rational and exponential functions
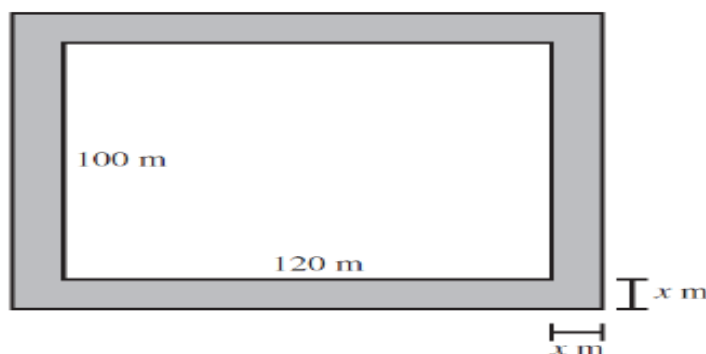
MCC9-12.F.BF.1.b: Combine standard function types using arithmetic operations. (Limit to linear and exponential functions.)

1. City planners recorded the number of walkers, cyclist, and vehicles that crossed Golden Bridge over the course of four days. The planners recorded their data in the two-way frequency table below.

Golden Bridge Traffic				
	Walkers	**Cyclists**	**Vehicles**	**Total**
Thursday	0	12	215	227
Friday	0	8	186	194
Saturday	1	62	61	124
Sunday	0	76	32	108
Total	1	158	494	653

What is one conclusion that can be made regarding cyclist traffic over Gold Bridge? Base your response on evidence from the table.

2. A rectangular field is 100 meters in width and 120 meters in length. The dimensions of the field will be expanded by x meters in each direction, as shown in the diagram.

100 m

120 m

x m

x m

Write a function to describe the perimeter of the new field in terms of x.

Biology: High School

Standard

SB2. Students will analyze how biological traits are passed on to successive generations.

b. Explain the role of DNA in storing and transmitting cellular information.
d. Describe the relationships between changes in DNA and potential appearance of new traits including:
- Alterations during replication
- Insertions
- Deletions
- Substitutions
- Mutagenic factors that can alter DNA
- High energy radiation (x-rays and ultraviolet)
- Chemical
f. Examine the use of DNA technology in forensics, medicine and agriculture.

Questions A-C refer to the following passage

The following paragraphs were adapted from an article in the March 1990 issue of Discover magazine.

THE ULTIMATE MEDICINE

Broken genes cause a variety of illnesses. Genetic surgeons can now go into a cell and fix those genes with an unlikely scalpel: a virus.

by Geoffrey Montgomery

The first time Richard Mulligan turned a virus into a truck, he was a 25-year-old graduate student. He had just performed an unprecedented feat of bioengineering -- he had used the tools of recombinant DNA technology to splice a rabbit gene into a monkey virus. Normally, viruses are vehicles for their own genes. In fact, they are little more than genetic material wrapped within a shell that allows the virus to travel from one cell to the next. They penetrate a cell, then commandeer the cell's genetic machinery into making thousands of virus copies. But with molecular sleight of hand, Mulligan had pulled out the genes that allow the virus to replicate and put in their place the genes for hemoglobin, the molecule in red blood cells that carries oxygen. Mulligan hoped that the genetically modified virus would no longer tell the cell it had entered to make more virus particles. It would just order hemoglobin proteins.

Mulligan assembled his fleet of viral "trucks," all with the hemoglobin gene in their cargo bay. Then he dumped a soupy solution of these viruses into a dish of cells from a monkey's kidney. Kidney cells have no roles in oxygen transport and do not normally make hemoglobin molecules. But these kidney cells, after their invasion by Mulligan's viruses, underwent an astonishing transformation. Spurred on by the unloaded hemoglobin genes, the kidney cells began to churn out hemoglobin molecules.

With those hemoglobin proteins, Mulligan had ushered in a revolutionary new vision of therapy for human genetic disease. His path-breaking gene-transfer experiment suggested that one could transform viruses, nature's parasites, into molecular ambulances capable of shuttling beneficial genes into ailing cells. It was more than a major event in basic biological research. It signaled the dawn of a new era of medicine, in which physicians would be able to reach down into the molecular foundations of a disease and cure an ailment by correcting its cause.

A. The article's introduction states that "Broken genes cause a variety of illnesses." Describe what is meant by a "broken gene." In other words, explain what makes a gene unable to work in the correct way, and describe what can cause a gene to become "broken."
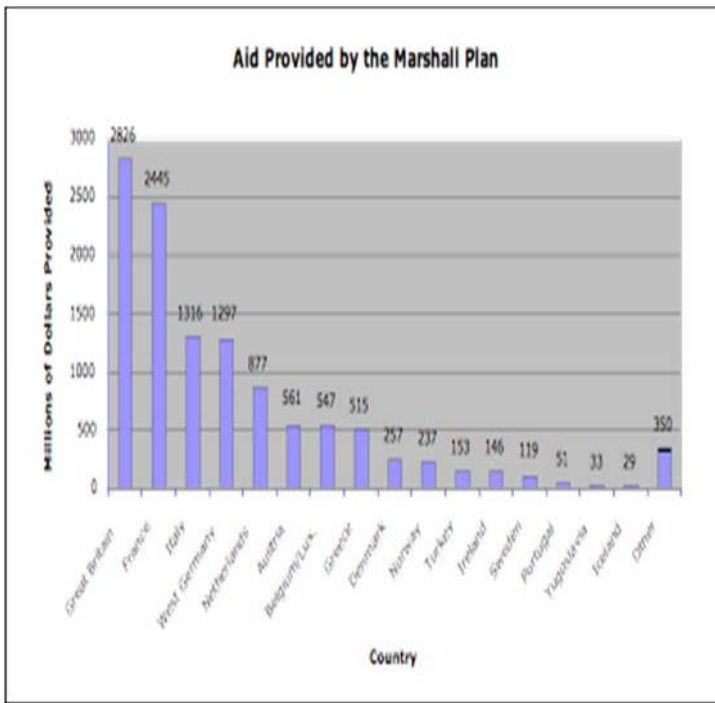
_____
_____
_____
_____
_____

B. In Richard Mulligan's experiment, a hemoglobin gene was carried in a virus. After the virus infected some kidney cells, the hemoglobin gene "told" the cells to make hemoglobin molecules. Briefly explain how the information that a gene provides to a cell results in the production of a molecule such as hemoglobin.

_____
_____
_____
_____
_____
_____

C. Biologists know that nearly all cells in a person's body contain the same genes. For example, kidney cells contain the same genes as the cells that normally make hemoglobin. Given these facts, explain why kidney cells do not make hemoglobin even though they contain the hemoglobin gene.

_____
_____
_____
_____
_____
_____

9th Grade Social Studies (World History)

SSWH18 The student will demonstrate an understanding of the global political, economic, and social impact of World War II.

d. Explain allied Post-World War II policies; include formation of the United Nations, the Marshall Plan for Europe, and MacArthur's plan for Japan.

Aid Provided by the Marshall Plan

The United Nations is formed.

WE THE PEOPLES OF THE UNITED NATIONS DETERMINED to save succeeding generations from the scourge of war, which twice in our lifetime has brought untold sorrow to mankind, and to reaffirm faith in fundamental human rights, in the dignity and worth of the human person, in the equal rights of men and women and of nations large and small, and to establish conditions under which justice and respect for the obligations arising from treaties and other sources of international law can be maintained, and to promote social progress and better standards of life in larger freedom, AND FOR THESE ENDS to practice tolerance and live together in peace with one another as good neighbours, and to unite our strength to maintain international peace and security, and to ensure, by the acceptance of principles and the institution of methods, that armed force shall not be used, save in the common interest, and to employ international machinery for the promotion of the economic and social advancement of all peoples,

HAVE RESOLVED TO COMBINE OUR EFFORTS TO ACCOMPLISH THESE AIMS.

Charter of the United Nations, June 26, 1945

Part A: Discuss the similarities and differences of the foreign policies of the Marshall Plan and the creation of the United Nations based on the following:

- Goals
- Successes
- Failures

> We are gathered here, representatives of the major warring powers, to conclude a solemn agreement whereby peace may be restored. The issues, involving divergent ideals and ideologies, have been determined on the battlefields of the world and hence are not for our discussion or debate. Nor is it for us here to meet, representing as we do a majority of the people of the earth, in a spirit of distrust, malice or hatred. But rather it is for us, both victors and vanquished, to rise to that higher dignity which alone befits the sacred purposes we are about to serve, committing all our people unreservedly to faithful compliance with the understanding they are here formally to assume.
>
> *Surrender ceremony on the U.S.S. Missouri, General Douglas MacArthur*

Part B: An excerpt from the speech delivered by General Douglas MacArthur at the Surrender Ceremony is provided above. Explain the events that ultimately led to General MacArthur's speech.