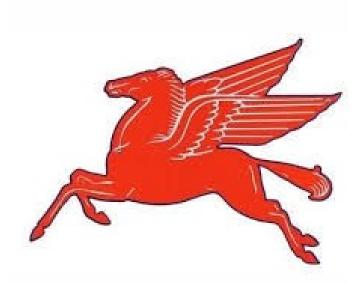
# **Curriculum Management System**

## **PAULSBORO PUBLIC SCHOOLS**



## Gifted & Talented Grade 3

#### UPDATED 2020-2021

For adoption by all regular education programs as specified and for adoption or adaptation by all Special Education Programs in accordance with Board of Education Policy.

**Board Approved: October 2021** 

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# **Paulsboro Public Schools**

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Mr. Matthew J. Browne, Principal, grades 3-6
Mr. Paul Morina, Principal, grades 7-12

# **Paulsboro Public Schools**

# **Mission Statement**

The mission of the Paulsboro School District is to work with students, parents, educators, and community to develop excellence in education while preparing each student to be viable and productive citizens in society. Our goal is to develop the unique potential of the whole student by creating a challenging and diverse learning climate that prepares students for the 21<sup>st</sup> Century and is rich in tradition and pride.

## PACING CHART (2020-2021)

ΤΟΡΙϹ	# OF DAYS	DATES	COMMENTS
Robotics	10-20	vary	focus on real world connection
building			sub-topic option
programming			sub-topic option
career exploration			sub-topic option
Engineering	10-20	vary	focus on real world connection
renewable energy			sub-topic option
air & water quality			sub-topic option
construction design			sub-topic option
career exploration			sub-topic option
Science	10-20	vary	focus on real world connection
biomedical			sub-topic option
forensic			sub-topic option
climate change			sub-topic option
career exploration			sub-topic option
Technology	10-20	vary	focus on real world connection
virtual & augmented			sub-topic option
reality			
circuits & electronics			sub-topic option
Animation & video game			sub-topic option
design			
digital textiles			sub-topic option
career exploration			sub-topic option

Dates and number of days will vary based on resources available and school schedules.

DEFINITIONS

**NJ Student Learning Standards** – Clear and specific benchmarks for students' achievement in various content areas. The standards ensure that each child receives a "thorough and efficient education".

21<sup>st</sup> Century Life and Careers Standards – These skills that are comprised of the "12 Career Ready Practices" and Standards 9.1 through 9.4. The organization of these standards intends to enable students to make informed decisions that prepare them to engage as active citizens in global society and be prepared for the opportunities of the 21<sup>st</sup> century workplace.

**ELA Companion Standards** – Consists of standards for reading and writing in History, Social Studies, Science and Technical subjects. ELA curricula

**Gifted and Talented Learners** – Students with high-ability who may need more depth and complexity in instruction.

**Special Education Learners** – Students in need of supports and interventions to improve student achievement

**English Language Learners** – Students with a native language other than English or who are at varying degrees of English language proficiency.

# QUARTER 1 –

## Big Idea: Robotics

#### **Topics:** Build/Program/ Career Exploration

Standards:	G	OAL
Standards: NGSS	SWBAT design and build robo SWBAT program/ code robots SWBAT explore careers in the Essential Questions	to perform tasks/functions.
and constraints on materials, time, or cost. 3-5-ETS1-2. Generate and compare multiple possible solutions to a problem based on how well each is likely to meet the criteria and constraints of the problem. 3-5- ETS1-3. Plan and carry out fair tests in which variables are controlled and failure points are considered to identify aspects of a model or prototype that can be improved. <b>21<sup>st</sup> Century Life and</b> <b>Careers:</b> CRP6. Demonstrate creativity and innovation	build a robot? 2. What task/ function car the robots perform? 3. What are careers in robotics?	(Include benchmark d assessments where possible – This could be a link to the assessment, a page reference in a book to the assessment or an attachment following this document referencing these standards and this goal.) Formative assessments include: interactive response, observation, active participation in a team environment, and/or data collection of investigation.
	Enduring Understanding	Resources

## QUARTER 2 -

**Big Idea:** Engineering

#### Topics: Renewable Energy/ Air & Water Quality/ Construction Design/ **Career Exploration**

## Standards:

#### NJ Student Learning Standards: NGSS

GOAL

SWBAT research & design sources of renewable energy SWBAT research & design measures of air & water quality 3-ESS2-2. Obtain and combine SWBAT research & create construction design information to describe climates in different regions of the world.

in different regions of the world.		
3-ESS3-1. Make a claim about	Essential Questions	Assessments
the merit of a design solution		
that reduces the impacts of a		(Include benchmark
weather-related hazard	1. What is renewable	assessments where possible –
3-LS4-4. Make a claim about	energy?	This could be a link to the
the merit of a solution to a	2. How is air & water	assessment, a page reference
problem caused when the	quality measured?	in a book to the assessment or
environment changes and the	3. What is construction	an attachment following this
types of plants and animals that		document referencing these
live there may change	4. What are careers in	standards and this goal.)
21 <sup>st</sup> Century Life and	engineering?	
Careers:		Formative assessments
CRP1. Act as a responsible		include: interactive response,
and contributing citizen and		observation, active participation in a team environment, and/or
employee		data collection of investigation.
CRP5. Consider the		
environmental, social and	Enduring Understanding	Resources
economic impacts of decisions	Enduring Understanding	Resources
economic impacts of decisions CRP7. Employ valid and		
economic impacts of decisions CRP7. Employ valid and reliable research strategies	Enduring Understanding Engineering Design Process	Renewable Energy Resources
economic impacts of decisions CRP7. Employ valid and reliable research strategies <b>Technology Standards:</b>	Engineering Design Process	Renewable Energy Resources Air & Water Resources
economic impacts of decisions CRP7. Employ valid and reliable research strategies <b>Technology Standards:</b> 8.2.5.D.1 Identify and collect		Renewable Energy Resources Air & Water Resources Construction Design
economic impacts of decisions CRP7. Employ valid and reliable research strategies <b>Technology Standards:</b> 8.2.5.D.1 Identify and collect information about a problem	Engineering Design Process	Renewable Energy Resources Air & Water Resources
economic impacts of decisions CRP7. Employ valid and reliable research strategies <b>Technology Standards:</b> 8.2.5.D.1 Identify and collect information about a problem that can be solved by	Engineering Design Process	Renewable Energy Resources Air & Water Resources Construction Design
economic impacts of decisions CRP7. Employ valid and reliable research strategies <b>Technology Standards:</b> 8.2.5.D.1 Identify and collect information about a problem that can be solved by technology, generate ideas to	Engineering Design Process	Renewable Energy Resources Air & Water Resources Construction Design
economic impacts of decisions CRP7. Employ valid and reliable research strategies <b>Technology Standards:</b> 8.2.5.D.1 Identify and collect information about a problem that can be solved by technology, generate ideas to solve the problem, and identify	Engineering Design Process	Renewable Energy Resources Air & Water Resources Construction Design
economic impacts of decisions CRP7. Employ valid and reliable research strategies <b>Technology Standards:</b> 8.2.5.D.1 Identify and collect information about a problem that can be solved by technology, generate ideas to solve the problem, and identify constraints and trade-offs to be	Engineering Design Process	Renewable Energy Resources Air & Water Resources Construction Design
economic impacts of decisions CRP7. Employ valid and reliable research strategies <b>Technology Standards:</b> 8.2.5.D.1 Identify and collect information about a problem that can be solved by technology, generate ideas to solve the problem, and identify constraints and trade-offs to be considered.	Engineering Design Process	Renewable Energy Resources Air & Water Resources Construction Design
economic impacts of decisions CRP7. Employ valid and reliable research strategies <b>Technology Standards:</b> 8.2.5.D.1 Identify and collect information about a problem that can be solved by technology, generate ideas to solve the problem, and identify constraints and trade-offs to be considered. 8.2.5.D.2 Evaluate and test	Engineering Design Process	Renewable Energy Resources Air & Water Resources Construction Design
economic impacts of decisions CRP7. Employ valid and reliable research strategies <b>Technology Standards:</b> 8.2.5.D.1 Identify and collect information about a problem that can be solved by technology, generate ideas to solve the problem, and identify constraints and trade-offs to be considered. 8.2.5.D.2 Evaluate and test alternative solutions to a	Engineering Design Process	Renewable Energy Resources Air & Water Resources Construction Design
economic impacts of decisions CRP7. Employ valid and reliable research strategies <b>Technology Standards:</b> 8.2.5.D.1 Identify and collect information about a problem that can be solved by technology, generate ideas to solve the problem, and identify constraints and trade-offs to be considered. 8.2.5.D.2 Evaluate and test	Engineering Design Process	Renewable Energy Resources Air & Water Resources Construction Design

design process to evaluate
potential solutions
ELA Companion Standards:
NJSLSA.SL4. Present
information, findings, and
supporting evidence such that
listeners can follow the line of
reasoning and the organization,
development, and style are
appropriate to task, purpose,
and audience
NJSLSA.SL5. Make strategic
use of digital media and visual
displays of data to express
information and enhance
understanding of presentations
MODIFICATIONS:
Gifted and Talented Learners:
student centered, compact
curriculum, flexible pacing,
assume ownership of own
learning
Special Education Learners:
written list of instructions,
extended time, alternate
projects, flexible use of
materials
English Language Learners:
extended time, teacher
modeling, simplified
instructions, frequent breaks

# QUARTER 3 –

#### Big Idea: Science

# Topic: Biomedical/ Forensic/ Climate Change/ Career Exploration Indards: GOAL

GO	AL	
SWBAT research & explore biomedical science. SWBAT research & explore forensic science. SWBAT research & explore climate change. SWBAT explore careers in science.		
Essential Questions	Assessments	
<ul> <li>science?</li> <li>What is forensic science?</li> <li>What is climate change?</li> <li>What are careers in science?</li> </ul>	(Include benchmark assessments where possible – This could be a link to the assessment, a page reference in a book to the assessment or an attachment following this document referencing these standards and this goal.) Formative assessments include: interactive response, observation, active participation in a team environment, and/or data collection of investigation.	
Enduring Understanding	Resources	
Aspects of biomedical science Aspects of forensic science Solutions to climate change Careers in Science	Biomedical Resources Forensic Resources Climate Change Resources	
	GO SWBAT research & explore bion SWBAT research & explore clim SWBAT research & explore clim SWBAT explore careers in scien Essential Questions 1. What is biomedical science? 2. What is forensic science? 3. What is climate change? 4. What are careers in science? 4. What are careers in science? 5. What are careers in science? 4. What are careers in science?	

8.2.5.A.5 Identify how improvement in the understanding of materials science impacts technologies. 8.2.8.A.4 Redesign an existing product that impacts the environment to lessen its impact(s) on the environment. ELA Companion Standards: NJSLSA.SL4. Present information, findings, and supporting evidence such that listeners can follow the line of reasoning and the organization, development, and style are appropriate to task, purpose, and audience NJSLSA.SL5. Make strategic use of digital media and visual displays of data to express information and enhance understanding of presentations **MODIFICATIONS:** Gifted and Talented Learners: student centered, compact curriculum, flexible pacing, assume ownership of own learning Special Education Learners: written list of instructions, extended time, alternate projects, flexible use of materials English Language Learners: extended time, teacher modeling, simplified instructions, frequent breaks

#### QUARTER 4 –

Big Idea: Technology

#### Topic: Virtual & Augmented Reality/ Electronics/ Video Game Design/ Digital Textiles/ Career Exploration

#### Standards:

#### NJ Student Learning Standards: NGSS

3-5-ETS1-1. Define a simple design problem reflecting a need or a want that includes specified criteria for success and constraints on materials, time, or cost. 3-5-ETS1-2. Generate and compare multiple possible solutions to a problem based on how well each is likely to meet the criteria and constraints of the problem. 3-5-ETS1-3. Plan and carry out fair tests in which variables are controlled and failure points are considered to identify aspects of a model or prototype that can be improved.

# 21<sup>st</sup> Century Life and Careers:

CRP2. Apply appropriate academic and technical skills. CRP6. Demonstrate creativity and innovation. CRP10. Plan education and career paths aligned to personal goals. CRP11. Use technology to enhance productivity. CRP12. Work productively in teams while using cultural global competence. **Technology Standards:** 

8.2.5.C.4 Collaborate and brainstorm with peers to solve a problem evaluating all

SWBAT explore virtual & augmented reality. SWBAT explore circuits & electronics. SWBAT explore animation & video game design. SWBAT explore digital textiles. SWBAT explore careers in technology.

GOAL

I	Essential Questions	Assessments
1.	What is virtual &	(Include benchmark assessments where possible –
	augmented reality?	This could be a link to the
2.	What are circuits &	assessment, a page reference
	electronics?	in a book to the assessment or
3.		an attachment following this
4	video game design?	document referencing these
4.	What are digital textiles?	standards and this goal.)
5.		Formative assessments
	technology?	include: interactive response,
		observation, active participation
		in a team environment, and/or
		data collection of investigation
F	nduring Understanding	Resources
	nduring onderstanding	Resources
	Aspects of virtual &	Resources
		Virtual Reality Resources
_	Aspects of virtual & augmented reality	Virtual Reality Resources Augmented Reality Resources
_	Aspects of virtual & augmented reality Aspects of circuits &	Virtual Reality Resources Augmented Reality Resources Circuit Resources
	Aspects of virtual & augmented reality	Virtual Reality Resources Augmented Reality Resources Circuit Resources Electronic Resources
	Aspects of virtual & augmented reality Aspects of circuits & electronics	Virtual Reality Resources Augmented Reality Resources Circuit Resources Electronic Resources Animation Resources
	Aspects of virtual & augmented reality Aspects of circuits &	Virtual Reality Resources Augmented Reality Resources Circuit Resources Electronic Resources
	Aspects of virtual & augmented reality Aspects of circuits & electronics Aspects of animation &	Virtual Reality Resources Augmented Reality Resources Circuit Resources Electronic Resources Animation Resources Video Game Design
	Aspects of virtual & augmented reality Aspects of circuits & electronics Aspects of animation & video game design Aspects of digital	Virtual Reality Resources Augmented Reality Resources Circuit Resources Electronic Resources Animation Resources Video Game Design Resources
	Aspects of virtual & augmented reality Aspects of circuits & electronics Aspects of animation & video game design	Virtual Reality Resources Augmented Reality Resources Circuit Resources Electronic Resources Animation Resources Video Game Design Resources

solutions to provide the best results with supporting sketches or models. 8.2.5.C.1 Collaborate with peers to illustrate components of a designed system 8.2.5.C.7 Work with peers to redesign an existing product for a different purpose ELA Companion Standards: NJSLSA.SL4. Present information, findings, and supporting evidence such that listeners can follow the line of reasoning and the organization, development, and style are appropriate to task, purpose, and audience NJSLSA.SL5. Make strategic use of digital media and visual displays of data to express information and enhance understanding of presentations **MODIFICATIONS:** Gifted and Talented Learners: student centered, compact curriculum, flexible pacing, assume ownership of own learning Special Education Learners: written list of instructions, extended time, alternate projects, flexible use of materials English Language Learners: extended time, teacher modeling, simplified instructions, frequent breaks