Moon Area School District Curriculum Map

Course: Library
Grade Level: 4
Content Area: Library
Frequency: 1/ every 5 day rotation

Big Ideas
1. LIBRARY – Independent book handling skills and retrieval.
2. LIBRARY – Continue to independently locate and select nonfiction and fiction texts on grade level for personal use and educational assignments.
3. LIBRARY – Continue to follow rules and procedures in library.
4. LIBRARY – Recognize books from a variety of genres and independently choose one for personal preference.
5. LIBRARY – Continue to use nonfiction texts and credible online resources to complete research assignments with teacher assistance.
6. STEAM – Draw from previously learned STEAM skills to complete a culminating project using robotics, coding, engineering and planning.
7. STEAM – Utilize different roles in groups to complete a culminating STEAM project.
8. STEAM – Apply the Engineering Design Process to complete a culminating STEAM project.

Essential Questions
9. Can I choose and apply the appropriate STEAM skill to create a robot that has moving parts, audio and visual components, and coding?
10. Can I utilize a role in a group to achieve team goals in a culminating project?
11. Can I move through the stages of planning to create a STEAM project using a variety of STEAM skills?
12. Can I analyze and make revisions to my project as necessary?
13. Can I follow a given set of directions to construct a finished product?
14. Can I use the online circulation system, Destiny, to independently search and locate books without assistance?
15. Can I locate books and resources for both pleasure and research?
16. Have I read a variety of genres for pleasure and research?
17. Can I navigate online databases in order to retrieve information pertinent to research?
18. Can I construct a simple circuit and recognize the difference between an open or closed circuit?

Primary Resource(s) & Technology:
Hummingbird Robot Kits, Little Bits Circuit Kits, Microsoft Teams, Promethean Boards, Student iPads, Destiny software, appropriate library materials, Makerspace materials

Pennsylvania and/or focus standards referenced at:

Big Ideas/ EQs	Focus Standard(s)	Assessed Competencies (Key content and skills)	Timeline
8, 12, 13, 18	3.2.4.B4	• Apply knowledge of basic electrical circuits to the design and construction of simple direct current circuits. • Compare and contrast series and parallel circuits. • Compare and contrast open and closed circuits. • Build a simple circuit in a group setting.	Dec – June
1, 2, 3, 4, 5, 14, 15, 16, 17	5.3.1.F CC.1.3.K.D CC.1.2.K.E	• Continue to follow library rules and procedures with minimal assistance. • Use Destiny to search for and locate a book with no assistance from the librarian. • Fill out a CAT slip independently to find materials in the library that the student would like to check out. • Identify preferences in genres and be able to locate and recommend them to others. • Become proficient at check-in and out procedures.	Sept - March
6, 7, 8, 9, 10, 11, 12, 13	1B.AP.10 1B.AP.11 1B.AP.13 1B.AP.15 1B.AP.16	• Create programs that include sequences, events, loops and conditionals. • Break down problems into smaller, manageable subproblems to facilitate the program development process. • Use an iterative process to plan the development of a program by including others' perspectives. • Test or debug a program or algorithm to ensure it runs as intended. • Take on varying roles under teacher guidance when collaborating with peers during the design implementation and review stages of program development. • Design, plan, and revise as necessary the Hummingbird Robotics projet.	Dec – March