Name: Gagnon	Grading Quarter: Q4	Week Beginning: W5
School Year: 2023	Subject: Fab Lab	

Monday	Notes: Teachers only	**Objective**: Science and Engineering Practices: Students will understand the use of the Arduino IDE, Basic C++ coding, sketch libraries and bread board prototyping for electronics as evidenced by the successful completion of 6 projects from the ELEGOO project list. **Lesson Overview:** • Safety discussion and demonstration. • Demonstration of Arduino IDE, libraries, and sketch downloads. • Demonstration introduction to Arduino mega 3600. • Independent work on coding projects.	Academic Standards: **HS-ETS1-4** Use a computer simulation to model the impact of proposed solutions to a complex real-world problem with numerous criteria and constraints on interactions within and between systems relevant to the problem.
Tuesday	Notes:	**Objective**: Science and Engineering Practices: Students will understand the use of the Arduino IDE, Basic C++ coding, sketch libraries and bread board prototyping for electronics as evidenced by the successful completion of 6 projects from the ELEGOO project list. This is week two of a two-week project. **Lesson Overview:** • Independent work on coding projects. • OR Review the Roland MDX40 online PBL./ Independent work on CNC project.	Academic Standards: **HS-ETS1-4** Use a computer simulation to model the impact of proposed solutions to a complex real-world problem with numerous criteria and constraints on interactions within and between systems relevant to the problem.
Wednesday		**Objective**: Science and Engineering Practices: Students will understand the use of the Arduino IDE, Basic C++ coding, sketch libraries and bread board prototyping for electronics as evidenced by the successful completion of 6 projects from the ELEGOO project list. This is week two of a two-week project. **Lesson Overview:** • Independent work on coding projects. • OR Review the Roland MDX40 online PBL./ Independent work on CNC project.	Academic Standards: **HS-ETS1-4** Use a computer simulation to model the impact of proposed solutions to a complex real-world problem with numerous criteria and constraints on interactions within and between systems relevant to the problem.
Thursday	Notes:	**Objective**: Science and Engineering Practices: Students will understand the use of the Arduino IDE, Basic C++ coding, sketch libraries and bread board prototyping for electronics as evidenced by the successful completion of 6 projects from the ELEGOO project list. This is week two of a two-week project. **Lesson Overview:** • Independent work on coding projects. • OR Review the Roland MDX40 online PBL./ Independent work on CNC project.	Academic Standards: **HS-ETS1-4** Use a computer simulation to model the impact of proposed solutions to a complex real-world problem with numerous criteria and constraints on interactions within and between systems relevant to the problem.
Friday	Notes:	**Objective**: Science and Engineering Practices: Students will understand the use of the Arduino IDE, Basic C++ coding, sketch libraries and bread board prototyping for electronics as evidenced by the successful completion of 6 projects from the ELEGOO project list. This is week two of a two-week project. **Lesson Overview:** • Independent work on coding projects. • OR Review the Roland MDX40 online PBL./ Independent work on CNC project.	Academic Standards: **HS-ETS1-4** Use a computer simulation to model the impact of proposed solutions to a complex real-world problem with numerous criteria and constraints on interactions within and between systems relevant to the problem.