Name: Gagnon	Grading Quarter: Q3	Week Beginning: 1/15 W2
School Year: 2024	Subject: Fab Lab	

	Notes:	Objective / Activities	Academic Standards
Monday	Notes: Teachers only	Objective: Science and Engineering Practices: Students will understand the use of Inkscape, an open-source graphic design program as evidenced by creating and printing a bumper sticker following classroom conventions for the project. • Students will use Inkscape to complete the bumper sticker project. • Intro to Inkscape and demonstration.	Academic Standards: **Arizona Science Standards Appendix 5 Technology Next generation science standards Engineering (4-ETS1-1):**
Tuesday	Notes:	Objective: Science and Engineering Practices: Students will understand the use of Inkscape, an open-source graphic design program as evidenced by creating and printing a bumper sticker following classroom conventions for the project. • Students will use Inkscape to complete the bumper sticker project.	Academic Standards: **Arizona Science Standards Appendix 5 Technology Next generation science standards Engineering (4-ETS1-1):**
Wednesday	Notes:	Objective: Science and Engineering Practices: Students will understand the use of Inkscape, an open-source graphic design program as evidenced by creating and printing a bumper sticker following classroom conventions for the project. • Students will use Inkscape to complete the bumper sticker project. • Completing and turning in their design as a PDF	Academic Standards: **Arizona Science Standards Appendix 5 Technology Next generation science standards Engineering (4-ETS1-1):**
Thursday	Notes:	Objective: Science and Engineering Practices: Students will understand the use of Inkscape, an open-source graphic design program as evidenced by creating and printing a bumper sticker following classroom conventions for the project. • Students will use Inkscape to complete the bumper sticker project. • Students will use the Roland printer to print their bumper stickers.	Academic Standards: **Arizona Science Standards Appendix 5 Technology Next generation science standards Engineering (4-ETS1-1):**
Friday	Notes:	Objective: Science and Engineering Practices: Students will understand the use of Inkscape, an open-source graphic design program as evidenced by creating and printing a bumper sticker following classroom conventions for the project. • Students will use Inkscape to complete the bumper sticker project. • Students will use the Roland printer to print their bumper stickers.	Academic Standards: **Arizona Science Standards Appendix 5 Technology Next generation science standards Engineering (4-ETS1-1):**

Name: Gagnon	Grading Quarter: Q3	Week Beginning: 1/22 W3
School Year: 2023-2024	Subject: Fab Lab	

Monday	Notes:	Objective: Science and Engineering Practices: Students will understand the use of Tinkercad, and Ultimaker Cura open-source CAD design and slicing program shown by creating and 3D printing a Key Fob following classroom discussions and instructions for the project. • Students will use Tinkercad to complete an original design of a 3D printed 3D Key fob project. • Intro to Tinkercad, Cura and 3D printing demonstration.	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 Tinkercad, and Ultimaker Cura open-source CAD design and slicing program shown by creating and 3D printing a Key Fob following classroom discussions and instructions for the project. • Students will use Tinkercad to complete an original design of a 3D printed 3D Key fob project. • Intro to Tinkercad, Cura and 3D printing demonstration.	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	Notes:	Objective: Science and Engineering Practices: Students will understand the use of Tinkercad, and Ultimaker Cura open-source CAD design and slicing program shown by creating and 3D printing a Key Fob following classroom discussions and instructions for the project. • Students will use Tinkercad to complete an original design of a 3D printed 3D Key fob project. • Intro to Tinkercad, Cura and 3D printing demonstration. • Intro to operating 3D Printers Ultimaker 2Go.	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 Tinkercad, and Ultimaker Cura open-source CAD design and slicing program shown by creating and 3D printing a Key Fob following classroom discussions and instructions for the project. • Students will use Tinkercad to complete an original design of a 3D printed 3D Key fob project. • Intro to Tinkercad, Cura and 3D printing demonstration. • Intro to operating 3D Printers Ultimaker 2Go.	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 Tinkercad, and Ultimaker Cura open-source CAD design and slicing program shown by creating and 3D printing a Key Fob following classroom discussions and instructions for the project. • Students will use Tinkercad to complete an original design of a 3D printed 3D Key fob project. • Intro to Tinkercad, Cura and 3D printing demonstration. • Intro to operating 3D Printers Ultimaker 2Go.	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.

	Name: Gagnon	Grading Quarter: Q3	Week Beginning: 1/23 W4
	School Year: 2024	Subject: Fab Lab	

	Notes:	Objective/Activities	Academic Standards
Monday	Notes: Teachers only	Objective: Science and Engineering Practices: Students will understand the use of Inkscape Bezier tool and the use of a laser cutter to make vector cuts as evidenced by creating a 3D model of their dream home design. Students will use Inkscape Bezier tool to complete an original design of a 3D model of their dream home. Intro to Tinkercad, Cura and 3D printing demonstration.	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 Inkscape Bezier tool and the use of a laser cutter to make vector cuts as evidenced by creating a 3D model of their dream home design. Students will use Inkscape Bezier tool to complete an original design of a 3D model of their dream home. Intro to Tinkercad, Cura and 3D printing demonstration.	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	Notes:	Objective: Science and Engineering Practices: Students will understand the use of Inkscape Bezier tool and the use of a laser cutter to make vector cuts as evidenced by creating a 3D model of their dream home design. Students will use Inkscape Bezier tool to complete an original design of a 3D model of their dream home. Intro to Tinkercad, Cura and 3D printing demonstration.	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 Inkscape Bezier tool and the use of a laser cutter to make vector cuts as evidenced by creating a 3D model of their dream home design. Students will use Inkscape Bezier tool to complete an original design of a 3D model of their dream home. Intro to Tinkercad, Cura and 3D printing demonstration.	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 Inkscape Bezier tool and the use of a laser cutter to make vector cuts as evidenced by creating a 3D model of their dream home design. Students will use Inkscape Bezier tool to complete an original design of a 3D model of their dream home. Intro to Tinkercad, Cura and 3D printing demonstration.	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.

	Name: Gagnon	Grading Quarter: Q1	Week Beginning: 2/5 W5
School Year: 2024		Subject: Fab Lab	

	Notes:	Objective	Academic Standards
Monday	Notes: Teachers only	Objective: Science and Engineering Practices: Students will understand the use of Inkscape Bezier tool and the use of a laser cutter to make vector cuts as evidenced by creating a 3D model of their dream home design. This is a two-week project. Students will use Inkscape Bezier tool to complete an original design of a 3D model of their dream home. Intro to Tinkercad, Cura and 3D printing demonstration.	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 Inkscape Bezier tool and the use of a laser cutter to make vector cuts as evidenced by creating a 3D model of their dream home design. This is a two-week project. Students will use Inkscape Bezier tool to complete an original design of a 3D model of their dream home. Intro to Tinkercad, Cura and 3D printing demonstration.	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	Notes:	Objective: Science and Engineering Practices: Students will understand the use of Inkscape Bezier tool and the use of a laser cutter to make vector cuts as evidenced by creating a 3D model of their dream home design. This is a two-week project. Students will use Inkscape Bezier tool to complete an original design of a 3D model of their dream home. Intro to Tinkercad, Cura and 3D printing demonstration.	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 Inkscape Bezier tool and the use of a laser cutter to make vector cuts as evidenced by creating a 3D model of their dream home design. This is a two-week project. Students will use Inkscape Bezier tool to complete an original design of a 3D model of their dream home. Intro to Tinkercad, Cura and 3D printing demonstration.	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 Inkscape Bezier tool and the use of a laser cutter to make vector cuts as evidenced by creating a 3D model of their dream home design. Due date. Students will use Inkscape Bezier tool to complete an original design of a 3D model of their dream home. Intro to Tinkercad, Cura and 3D printing demonstration.	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.

		Name: Gagnon	Grading Quarter: Q3	Week Beginning: 2/12 W6
		School Year: 2024	Subject: Fab Lab	
Monday	Notes: Teachers only	Objective: Science and Engineering Practices: Students will understand the use of Inkscape Bezier tool and the use of a laser cutter to make vector cuts as evidenced by creating a 3D model of their dream home design. This is a two-week project. Students will use Inkscape Bezier tool to complete an original design of a 3D model of their dream home. Intro to Tinkercad, Cura and 3D printing demonstration.		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 Inkscape Bezier tool and the use of a laser cutter to make vector cuts as evidenced by creating a 3D model of their dream home design. This is a two-week project. Students will use Inkscape Bezier tool to complete an original design of a 3D model of their dream home. Intro to Tinkercad, Cura and 3D printing demonstration.		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	Notes:	Objective: Science and Engineering Practices: Students will understand the use of Inkscape Bezier tool and the use of a laser cutter to make vector cuts as evidenced by creating a 3D model of their dream home design. This is a two-week project. Students will use Inkscape Bezier tool to complete an original design of a 3D model of their dream home. Intro to Tinkercad, Cura and 3D printing demonstration.		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 Inkscape Bezier tool and the use of a laser cutter to make vector cuts as evidenced by creating a 3D model of their dream home design. This is a two-week project. Students will use Inkscape Bezier tool to complete an original design of a 3D model of their dream home. Intro to Tinkercad, Cura and 3D printing demonstration.		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:	• NO SCHOOL		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.

		Name: Gagnon	Grading Quarter: Q3	Week Beginning: W7
School Year: 2024			Subject: Fab Lab	

	Notes:		
Monday	Notes:	• President's Day No School	
Tuesday	Notes:	**Objective**: Science and Engineering Practices: Students will understand the use of Inkscape and GIMP photo editing, scale, aspect ratio and cropping including the use the laser raster function to print a photo on paper evidenced by creating laser photo project. This is a two-week project. This is s two-week project. **Lesson Overview:** • Students' demonstration including photo editing in Inkscape. • Completion of all projects for this quarter.	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	Notes:	**Objective**: Science and Engineering Practices: Students will understand the use of Inkscape and GIMP photo editing, scale, aspect ratio and cropping including the use the laser raster function to print a photo on paper evidenced by creating laser photo project. This is a two-week project. This is s two-week project. **Lesson Overview:** • Students' demonstration including photo editing in Inkscape. • Completion of all projects for this quarter.	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 Inkscape and GIMP photo editing, scale, aspect ratio and cropping including the use the laser raster function to print a photo on paper evidenced by creating laser photo project. This is a two-week project. This is s two-week project. **Lesson Overview:** • Students' demonstration including photo editing in Inkscape. • Completion of all projects for this quarter.	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 Inkscape and GIMP photo editing, scale, aspect ratio and cropping including the use the laser raster function to print a photo on paper evidenced by creating laser photo project. This is a two-week project. This is s two-week project. **Lesson Overview:** • Students' demonstration including photo editing in Inkscape. • Completion of all projects for this quarter..	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.