2022/23 Spring Syllabus Future Skills Grade 4

Orbiter Landing Device			
Week	Stage	Syllabus content	Note
1	Ask	**Project introduction – Context and problem to be solved.**	p. 2-3 #1
2	Imagine	**Research.** **Inquiry - Gravity**	p. 3-4
3	Imagine	**Research.** **Inquiry - Air Resistance**	p. 3-4 #4
4	Plan and Design	**Study the various options laid out during the imagine stage to design a safe cabin and shock absorbing base.** **Select structure design.** **Study material and brainstorm with your group.**	p. 4-5
5	Plan and Design	**Finalize the lander design with fully labeled sketches.**	p. 4-5
6	Create	**Put the lander together, reflect on progress and make necessary adjustments.**	-
7	Create	**Put the lander together, reflect on progress and make necessary adjustments.**	-
8	Test	**Test your lander and observe if it meets the test conditions as outlined.** **Make observations.**	p. 6
9	Communicate Results	**Analyze test results and make conclusions.** **Reflect on areas for improvement in your design.**	p. 6
10	Redesign /Retest	**Make changes to your design and retest it.** **Analyze results**	p. 7

Aqueduct			
Week	Stage	Syllabus content	Note
1	Ask	**Project introduction – Context and problem to be solved.**	p. 2-3
2	Imagine	**Research.** **Inquiry - Marble Run**	p. 3-4
3	Imagine	**Research.** **Inquiry - Roller Coaster**	p. 3-4
4	Plan and Design	**Study the various options laid out during the imagine stage to design your aqueduct.** **Select structure design.** **Study material and brainstorm with your group.**	p. 5-6
5	Plan and Design	**Finalize the aqueduct design with fully labeled sketches.**	p. 5-6
6	Create	**Put the aqueduct together, reflect on progress and make necessary adjustments.**	-
7	Create	**Put the aqueduct together, reflect on progress and make necessary adjustments.**	-
8	Test	**Test and observe your aqueduct's performance.** **Evaluate it against the design constraints and test requirements.**	p. 7 data table
9	Communicate Results	**Analyze test results and make conclusions.** **Reflect on areas for improvement in your design.**	p. 7
10	Redesign /Retest	**Make changes to your design and retest it.** **Analyze results**	p. 8