Quest ISS Program Payloads List and Launches, sorted by year

Payload Number	Title of Payload	Payload Organization	Launch Date	Type	Returned	Comments
2010 - 2011 Launch (Quest 1)						
1	Seed Germination	Valley Christian HS, 1st Flight	HTV2 22 January 2011	aluminum 2U Design	2011	
2011 - 2012 Launch (Quest 2)						
2	Electroplating Bronze & Gold	Valley Christian HS	ATV3 22 March 2012	1/4 of Module #16	2012	
3	Concrete Mixing	Faith Christian Academy	ATV3 22 March 2012	1/4 of Module #16	2012	
4	E-Coli Bacteria Growth	Whittier	ATV3 22 March 2012	1/4 of Module #16	2012	
5	Fan Propelled Mini-Robot	Fremont	ATV3 22 March 2012	1/4 of Module #16	2012	
6	Electromagnetic Ferrofluid	Valley Christian HS	ATV3 22 March 2012	1/4 of Module #18	2012	
7	Bacillus Subtilis Bacteria Growth	Valley Christian HS	ATV3 22 March 2012	1/4 of Module #18	2012	
8	Wisconsin and thyme Plants	Valley Christian HS	ATV3 22 March 2012	1/2 of Module #18	2012	
2012 - 2013 Launch (Quest 3)						
9	Alum Crystal Growth	BEWiSE Girl of San Diego	CRS2 1 March 2013	1/4 of Module #16	2013	
10	Microgreen Plant Growth	Girl Scouts of Hawaii	CRS2 1 March 2013	1/4 of Module #16	2013	
11	Iron Oxide Resistance	Los Gatos High School	CRS2 1 March 2013	1/4 of Module #16	2013	
12	ISS C02 Sensor	Maranatha High School	CRS2 1 March 2013	1/4 of Module #16	2013	
13	Latex Polymer Coalescence	Minnehaha Academy	CRS2 1 March 2013	1/4 of Module #18	2013	
14	E-Coli Growth	Riverside Christian	CRS2 1 March 2013	1/8 of Module #18	2013	
15	Battery life Test	Riverside Christian	CRS2 1 March 2013	1/8 of Module #18	2013	
16	ISS Microgravity Measurement	Fremont Christian	CRS2 1 March 2013	1/4 of Module #18	2013	
17	Wisconsin Fast Plant Growth	Valley Christian HS	CRS2 1 March 2013	1/2 of Module #18	2013	
18	Electromagnetic Ferro Fluid	Valley Christian HS	CRS2 1 March 2013	1/4 of Module #20	2013	
19	E-Coli Bacteria Illumines	Valley Christian HS	CRS2 1 March 2013	1/4 of Module #20	2013	
20	Electroplating	Valley Christian HS	CRS2 1 March 2013	1/4 of Module #20	2013	
2013 - 2014 Launch (Quest 4)						
21	E-Coli Bacteria/with Kanamycin	Valley Christian HS	OA2 14 July 2014	1/4 of Module #16	2014	
22	E-coli Bacteria Growth & UV	Riverside Christian	OA2 14 July 2014	1/4 of Module #16	2014	
23	Arugula growth	Girl Scouts of Hawaii	OA2 14 July 2014	1/4 of Module #22	2014	
24	Fast plant, Chives, Dandelions	Valley Christian HS	OA2 14 July 2014	1/2 of Module #18	2014	
25	Ant Colony Behavior	Valley Christian HS	OA2 14 July 2014	1/2 of Module #22	2014	
26	ISS Radiation Background	Valley Christian HS	OA2 14 July 2014	1/4 of Module #16	2014	
27	long term Radiation monitoring	San Diego Science Alliance	OA2 14 July 2014	1/4 of Module #18	2014	
28	Thermal Conductivity	Valley Christian JHS	OA2 14 July 2014	1/4 of Module #18	2014	
29	Fungus Mycelium Growth	Espoo, Finland	OA2 14 July 2014	1/4 of Module #20	2014	
30	Fluid Flow	Minnehaha Academy	OA2 14 July 2014	1/4 of Module #20	2014	
31	Penicillin Growth	Valley Christian JHS	OA2 14 July 2014	1/4 of Module #20	2014	
32	Lithium Battery Life Test	Riverside Christian	OA2 14 July 2014	1/4 of Module #20	2014	
33	ISS CO2 Detailed Measurement	Maranatha Christian	OA2 14 July 2014	1/4 of Module #21	2014	
34	Pollen Propulsion	Ambassador High School	OA2 14 July 2014	1/4 of Module #21	2014	
35	Crystallization Growth Protein	Fremont Christian High School	OA2 14 July 2014	1/4 of Module #21	2014	
36	Mealworm Exoskeleton Density	McMinnville Oregon High School	OA2 14 July 2014	1/4 of Module #21	2014	
2014 - 2015 Launch (Quest 5)						
37	Protein Crystallization Growth	Valley Christian HS	CRS-7 Space X 5/28/2015	1/2 of Module #16	Lost on Launch	
38	Heat Conduction in Materials	Valley Christian JHS	CRS-7 Space X 5/28/2015	1/4 of Module #16	Lost on Launch	
39	High energy Detection	Valley Christian HS	CRS-7 Space X 5/28/2015	1/4 of Module #16	Lost on Launch	
40	Pre-Inoculation of Soybeans	Valley Christian HS	CRS-7 Space X 5/28/2015	1/2 of Module #18	Lost on Launch	
41	Magnetic Field detection	Valley Christian Hs	CRS-7 Space X 5/28/2015	1/4 of Module #18	Lost on Launch	
42	Radiation coupled with Magnetic	Valley Christian HS	CRS-7 Space X 5/28/2015	1/4 of Module #18	Lost on Launch	
43	Fungus Growth	Espoo Finland Christian	CRS-7 Space X 5/28/2015	1/4 of Module #20	Lost on Launch	
44	Magnetorheological Fluids	Carmel Christian High School	CRS-7 Space X 5/28/2015	1/4 of Module #20	Lost on Launch	
45	Metal Corrosion	McMinnville High School	CRS-7 Space X 5/28/2015	1/4 of Module #20	Lost on Launch	
46	Expanded Pollen Transportation	Ambassador High School	CRS-7 Space X 5/28/2015	1/4 of Module #20	Lost on Launch	
47	Silver Crystal Growth	Valley Christian HS	CRS-7 Space X 5/28/2015	1/4 of Module #21	Lost on Launch	
48	EEPROM Memory Loss test	Valley Christian HS	CRS-7 Space X 5/28/2015	1/4 of Module #21	Lost on Launch	
49	Vibration of Wisconsin Fast Plants	Valley Christian HS	CRS-7 Space X 5/28/2015	1/2 of Module #21	Lost on Launch	
50	Antimicrobial Surfaces growth	Minnehaha High School	CRS-7 Space X 5/28/2015	1/4 of Module #22	Lost on Launch	
51	Super Capacitor Dielectric	Desert Christian High School	CRS-7 Space X 5/28/2015	1/4 of Module #22	Lost on Launch	

52	Liquid Bridge Deformation	San Diego Science Alliance	CRS-7 Space X 5/28/2015	1/4 of Module #22	Lost on Launch	
53	Painted Solar Panel Efficiency	Valley Dublin	CRS-7 Space X 5/28/2015	1/4 of Module #22	Lost on Launch	
ReLaunch 2014 - 2015 Launch (Quest 6)						
54	Protein Crystallization Growth	Valley Christian HS	OA-4 12/06/2015	1/2 of Module #16	05/11 Dragon	Re-Launched
55	Heat Conduction in Materials	Valley Christian JHS	OA-4 12/06/2015	1/4 of Module #16	05/11 Dragon	Re-Launched
56	High energy Detection	Valley Christian HS	OA-4 12/06/2015	1/4 of Module #16	05/11 Dragon	Re-Launched
57	Pre-Inoculation of Soybeans	Valley Christian HS	OA-4 12/06/2015	1/2 of Module #18	05/11 Dragon	Re-Launched
58	Magnetic Field detection	Valley Christian Hs	OA-4 12/06/2015	1/4 of Module #18	05/11 Dragon	Re-Launched
59	Radiation coupled with Magnetic	Valley Christian HS	OA-4 12/06/2015	1/4 of Module #18	05/11 Dragon	Re-Launched
60	Fungus Growth	Espoo Finland Christian	OA-4 12/06/2015	1/4 of Module #20	05/11 Dragon	Re-Launched
61	Magnetorheological Fluids	Carmel Christian High School	OA-4 12/06/2015	1/4 of Module #20	05/11 Dragon	Re-Launched
62	Metal Corrosion	McMinnville High School	OA-4 12/06/2015	1/4 of Module #20	05/11 Dragon	Re-Launched
63	Expanded Pollen Transportation	Ambassador High School	OA-4 12/06/2015	1/4 of Module #20	05/11 Dragon	Re-Launched
64	Silver Crystal Growth	Valley Christian HS	OA-4 12/06/2015	1/4 of Module #21	05/11 Dragon	Re-Launched
65	EEPROM Memory Loss test	Valley Christian HS	OA-4 12/06/2015	1/4 of Module #21	05/11 Dragon	Re-Launched
66	Vibration of Wisconsin Fast Plants	Valley Christian HS	OA-4 12/06/2015	1/2 of Module #21	05/11 Dragon	Re-Launched
67	Super Capacitor Dielectric	Desert Christian High School	OA-4 12/06/2015	1/4 of Module #22	05/11 Dragon	Re-Launched
68	Liquid Bridge Deformation	San Diego Science Alliance	OA-4 12/06/2015	1/4 of Module #22	05/11 Dragon	Re-Launched
69	Painted Solar Panel Efficiency	Valley Dublin	OA-4 12/06/2015	1/4 of Module #22	05/11 Dragon	Re-Launched
2015 - 2016 Launch (Quest 7)						
70	E-Coli Bacteria Chemotaxis	Valley Christian HS	**OA-6 03/22/2016**	1/2 - NPR-10016	05/11 Dragon	
71	Mixing Fluids with Detergents	Valley Christian HS	**OA-6 03/22/2016**	1/4 - NPR-10016	05/11 Dragon	
72	Heat Transfer in Microgravity	Valley Christian JH	**OA-6 03/22/2016**	1/4 - NPR-10016	05/11 Dragon	
73	Colony of Bacteria and Yeast	Valley Christian HS	**OA-6 03/22/2016**	1/4 - NPR-10018	05/11 Dragon	
74	Oryza Sativa Plant Growth	Surya Institute Indonesia	**OA-6 03/22/2016**	1/4 - NPR-10018	05/11 Dragon	
75	Microcossis Luteus Antibiotic	David Thibodeaux, La	**OA-6 03/22/2016**	1/4 - NPR-10018	05/11 Dragon	
76	Polyvinyl Alcohol Films	Valley Dublin	**OA-6 03/22/2016**	1/4 - NPR-10018	05/11 Dragon	
77	Plant Growth and recovery	McMinnville HS	**CRS-8 04/08/2016**	1/4 - NPR-10020	05/11 Dragon	
78	Fungal Mycelium Growth	Espoo Finland	**CRS-8 04/08/2016**	1/4 - NPR-10020	05/11 Dragon	
79	Graphene Super Capacitors	Desert Christian	**CRS-8 04/08/2016**	1/4 - NPR-10020	05/11 Dragon	
80	Cress Plant Phototropic	San Diego Science/Maranatha	**CRS-8 04/08/2016**	1/4 - NPR-10020	05/11 Dragon	
81	Micro-aerobic Saccharomyce	Del Superior HS, Indonesia	**OA-6 03/22/2016**	1/4 - NPR-10021	05/11 Dragon	
82	SpaceShrooms growth	Carmel Christian	**OA-6 03/22/2016**	1/4 - NPR-10021	05/11 Dragon	
83	Vibration Cancellation	Minnehaha Academy	**OA-6 03/22/2016**	1/4 - NPR-10021	05/11 Dragon	
84	Phototropism of Arabidopsis	Minnehaha Academy	**OA-6 03/22/2016**	1/4 - NPR-10021	05/11 Dragon	
85	Electric field on Plant Growth	Valley Christian HS	**CRS-8 04/08/2016**	1/4 - NPR-10022R	05/11 Dragon	
86	Instrumentation Experiment	Valley Christian HS	**CRS-8 04/08/2016**	1/4 - NPR-10022R	05/11 Dragon	
87	Water Purification	Valley Christian HS	**CRS-8 04/08/2016**	1/4 - NPR-10022R	05/11 Dragon	
88	Plant Growth Experiment	Modesto Christian	**CRS-8 04/08/2016**	1/4 - NPR-10022R	05/11 Dragon	
2016 - 2017 Launch (Quest 8)						
89	The Effects of Microgravity and Tardigrades on the Ethanol Production of Yeast Experiment	Carmel Christian	**SpaceX-11 CRS 11 June 3 @ 21:07 UTC**	1/4-NPR-10016/SN1006	3 July @ 12:12 UTC 2017	
90	Genetically Engineering E. coli to Produce Melanin through the Insertion of the Tyrosinase Plasmid Experiment	Singapore American School	**SpaceX-11 CRS 11 June 3 @ 21:07 UTC**	1/4-NPR-10020/SN1006	3 July @ 12:12 UTC 2017	
91	The Effects of a Varied Magnetic Field on Magnetorheological Fluid in Microgravity Experiment	Valley Christian HS	**SpaceX-11 CRS 11 June 3 @ 21:07 UTC**	1/4-NPR-10018/SN1006	3 July @ 12:12 UTC 2017	
92	The Effects of BAM-FX Plant Nutrient Solution on Plant Growth in Microgravity Experiment	Valley Christian HS	**SpaceX-11 CRS 11 June 3 @ 21:07 UTC**	1/2-NPR-10021/SN1006	3 July @ 12:12 UTC 2017	
93	The Effects of Microgravity on Probiotics Growth Experiment	Valley Christian HS	**SpaceX-11 CRS 11 June 3 @ 21:07 UTC**	1/4-NPR-10018/SN1006	3 July @ 12:12 UTC 2017	
94	Water Crystallization in Microgravity Experiment	Valley Christian HS	**SpaceX-11 CRS 11 June 3 @ 21:07 UTC**	1/2-NPR-10016/SN1006	3 July @ 12:12 UTC 2017	
95	The Effects of Microgravity on Brine Shrimp Experiment	Valley Christian HS	**SpaceX-11 CRS 11 June 3 @ 21:07 UTC**	1/4-NPR-10016/SN1006	3 July @ 12:12 UTC 2017	
96	The Effects of Microgravity on Neural Development of C. elegans	Valley Christian HS	**SpaceX-11 CRS 11 June 3 @ 21:07 UTC**	1/4-NPR-10018/SN1006	3 July @ 12:12 UTC 2017	
97	Phototropism in Microgravity II Experiment	San Diego Youth Space Program	**SpaceX-11 CRS 11 June 3 @ 21:07 UTC**	1/4-NPR-10020/SN1006	3 July @ 12:12 UTC 2017	

98	Comparing the Growth of Spirulina Algae on Earth and in Microgravity Experiment	Modesto Christian	**SpaceX-11 CRS 11 June 3 @ 21:07 UTC**	1/4-NPR-10021/SN1006	3 July @ 12:12 UTC 2017	
99	Crystal Formation in Microgravity Experiment	Valley Christian High School Dublin	**SpaceX-11 CRS 11 June 3 @ 21:07 UTC**	1/4-NPR-10020/SN1006	3 July @ 12:12 UTC 2017	
100	The Making of Tempeh in Microgravity Experiment	Del Superior High School Indonesia	**SpaceX-11 CRS 11 June 3 @ 21:07 UTC**	1/4-NPR-10020/SN1006	3 July @ 12:12 UTC 2017	
2017 - 2018 Launch Space Tango Qualification Flight (Quest 9)			**(Note: On Orbit 1 year, 10 months, 5 days, 19 hours, 10 minutes)(644.80 days)**			
101	Bam-FX F2	Valley Christian HS	**SpaceX-14 April 2 2018 @20:30:28UTC**	1/4 - Tango 001-Q1	Spacex-19 Jan 7 2020 @ 15:40 UTC	**On orbit 1 year 10 months 5 days 19 hours 10 minutes**
102	Bam-FX	Valley Christian HS	**SpaceX-14 April 2 2018 @20:30:28UTC**	1/4 - Tango 001-Q2	Spacex-19 Jan 7 2020 @ 15:40 UTC	**On orbit 1 year 10 months 5 days 19 hours 10 minutes**
103	High Voltage Control	Valley Christian HS	**SpaceX-14 April 2 2018 @20:30:28UTC**	1/4 - Tango 001-Q3	Spacex-19 Jan 7 2020 @ 15:40 UTC	**On orbit 1 year 10 months 5 days 19 hours 10 minutes**
104	High Voltage E Field Test	Valley Christian HS	**SpaceX-14 April 2 2018 @20:30:28UTC**	1/4 - Tango 001-Q4	Spacex-19 Jan 7 2020 @ 15:40 UTC	**On orbit 1 year 10 months 5 days 19 hours 10 minutes**
2017 - 2018 Launch Space Tango Full Card (14 microlab) (Quest 10)						
105	Light, Ferro, Geiger	Valley Christian HS	**OA9 Launched 21 May 2018**	1/4 - Micro Module A	CRS-15 3 Aug 2018	
106	Electrochemical Microbial	Valley Christian HS	**OA9 Launched 21 May 2018**	1/4 - Micro Module A	CRS-15 3 Aug 2018	
107	Bam FX reference	Valley Christian HS	**OA9 Launched 21 May 2018**	1/4 - Micro Module A	CRS-15 3 Aug 2018	
108	Bam FX	Valley Christian JH	**OA9 Launched 21 May 2018**	1/4 - Micro Module A	CRS-15 3 Aug 2018	
109	Rice Decomposition	Maranatha/san Diego	**OA9 Launched 21 May 2018**	1/4 - Micro Module B	CRS-15 3 Aug 2018	
110	Slime mold 3D maze in MicroG	Chandra Kusuma	**OA9 Launched 21 May 2018**	1/4 - Micro Module B	CRS-15 3 Aug 2018	
111	Slime mold patterned Structure	VCS Dublin	**OA9 Launched 21 May 2018**	1/4 - Micro Module B	CRS-15 3 Aug 2018	
112	Magnetorheolical fluid	SwinBurne Univ.	**OA9 Launched 21 May 2018**	1/4 - Micro Module B	CRS-15 3 Aug 2018	
113	Lactococcus Fermentation	Valley Christian HS	**OA9 Launched 21 May 2018**	1/4 - Micro Module C	CRS-15 3 Aug 2018	
114	Biofilm Formation with copper	Valley Christian HS	**OA9 Launched 21 May 2018**	1/4 - Micro Module C	CRS-15 3 Aug 2018	
115	Qualities of magnetorheolocial	Carmel Christian	**OA9 Launched 21 May 2018**	1/4 - Micro Module C	CRS-15 3 Aug 2018	
116	Sharklet preventing Ecoli	Valley Christian HS	**OA9 Launched 21 May 2018**	1/4 - Micro Module C	CRS-15 3 Aug 2018	
117	**Copper Crystal Growth**	Minnehaha Academy	**OA9 Launched 21 May 2018**	1/4 - Micro Module D	CRS-15 3 Aug 2018	
118	**copper/bronz electroplating**	Singapore American	**OA9 Launched 21 May 2018**	1/4 - Micro Module D	CRS-15 3 Aug 2018	
2018- 2019 Launch Space Tango Full Card (14 MicroLabs) (Quest 11)						
119	Effectiveness of BioSafe antimicrobial on e-coli growth in microgravity	Valley Christian HS #1	**NG-11 Launched 17 April 2019**	Locator C0	CRS-17 3 June 2019	
120	Effects of microgravity on hydrophobicity and dirt repulsion of lotusan paint	Valley Christian HS #2	**NG-11 Launched 17 April 2019**	Locator C3	CRS-17 3 June 2019	
121	Yeast Fermentation in Space	Valley Christian HS #3	**NG-11 Launched 17 April 2019**	Locator B2	CRS-17 3 June 2019	
122	Effect of microgravity on the electrochemical characteristics and power output of a microbial fuel cell	Valley Christian HS #4	**NG-11 Launched 17 April 2019**	Locator A3	CRS-17 3 June 2019	
123	Creating a robotic control system in microgravity	Valley Christian HS #5	**NG-11 Launched 17 April 2019**	Locator A1	CRS-17 3 June 2019	
124	Iron corrosion in spaceflight	Valley Christian HS #6	**NG-11 Launched 17 April 2019**	Locator A2	CRS-17 3 June 2019	
125	Crystal oscillators in space	Brethren Christian	**NG-11 Launched 17 April 2019**	Locator D0	CRS-17 3 June 2019	

126	The effect of fluctuating environmental parameters on functional behavior of slime molds	American School, Atl	**NG-11 Launched 17 April 2019**	Locator C2	CRS-17 3 June 2019	
127	Vibration cancellation experiment	Minnehaha academy	**NG-11 Launched 17 April 2019**	Locator B3	CRS-17 3 June 2019	
128	Effect of microgravity on flow rate of water	Carmel Christian	**NG-11 Launched 17 April 2019**	Locator D3	CRS-17 3 June 2019	
129	Piezoelectric crystal growth in microgravity	Singapore American	**NG-11 Launched 17 April 2019**	Locator C1	CRS-17 3 June 2019	
130	The effect of Microgravity on the Crystallinity of Polycaprolactone annealed from the Melt	Calvary Christian	**NG-11 Launched 17 April 2019**	Locator B0	CRS-17 3 June 2019	
131	Crystal formation on electrified graphene substrate in microgravity	VCS Dublin	**NG-11 Launched 17 April 2019**	Locator B1	CRS-17 3 June 2019	
132	Effects of microgravity on tooth decay	Swinburne Univ.	**NG-11 Launched 17 April 2019**	Locator A0	CRS-17 3 June 2019	
2019-2020 Launch Space Tango NEW 1.5 Card Full Card (14+ MicroLabs) (Quest XII) (18 payloads)						
133	Refraction of Light and Wrinkling Effect of a Liquid Fluid Interface in Microgravity	Valley Christian HS Team I **NNL03_I**	**NG-13 Launched Feburary 9 2020**	B2	CRS-20 7 Apr 2020	
134	Crystallization of Saturated Borax in a Microgravity Environment 1/2 Double	Valley Christian HS Team H **NNL03_H,H1**	**NG-13 Launched Feburary 9 2020**	B3	CRS-20 7 Apr 2020	
135	The Effects of Microgravity on Sea Mounky Growth and Development	Valley Christian HS Team J **NNL03_J**	**NG-13 Launched Feburary 9 2020**	C0	CRS-20 7 Apr 2020	
136	The Effects on Endophytes on Rice Plant Growth in Microgravity Unit A	Valley Christian HS Team K **NNL03_K,K1**	**NG-13 Launched Feburary 9 2020**	A0	CRS-20 7 Apr 2020	
137	The Effects on Endophytes on Rice Plant Growth in Microgravity Unit B	Valley Christian HS Team K **NNL03_P,K2**	**NG-13 Launched Feburary 9 2020**	A1	CRS-20 7 Apr 2020	
138	The Effects on Endophytes on Rice Plant Growth in Microgravity Control A	Valley Christian HS Team K **NNL03_Q,K3**	**NG-13 Launched Feburary 9 2020**	A2	CRS-20 7 Apr 2020	
139	The Effects on Endophytes on Rice Plant Growth in Microgravity Control B	Valley Christian HS Team K **NNL03_R,K4**	**NG-13 Launched Feburary 9 2020**	A3	CRS-20 7 Apr 2020	
140	Crystallization of Saturated Borax in a Microgravity Environment 1/2 Double	Valley Christian Team H **NNL03_D,H2**	**NG-13 Launched Feburary 9 2020**	B1	CRS-20 7 Apr 2020	
141	Crystallization of aragonite calcium carbonate in Microgravity	Minnehaha academy **NNL03_A**	**NG-13 Launched Feburary 9 2020**	D0	CRS-20 7 Apr 2020	
142	The Effect of Rust on Steel Conductivity in Microgravity	Carmel Christian **NNL03_B**	**NG-13 Launched Feburary 9 2020**	D1	CRS-20 7 Apr 2020	
143	Crystallization of Potassium Nitrate and ammonium cloride in Microgravity	Carmel Christain **NNL03_C**	**NG-13 Launched Feburary 9 2020**	D2	CRS-20 7 Apr 2020	
144	Removing carbon dioxide from the air using guanidine (PyBIG)	Singapore American **NNL03_F**	**NG-13 Launched Feburary 9 2020**	C3	CRS-20 7 Apr 2020	
145	Investagating a Biome using calcine clay, yeast, and chia seeds	Swinburne Univ **NNL03_E**	**NG-13 Launched Feburary 9 2020**	C2	CRS-20 7 Apr 2020	
146	The Effect of Microgravity on the Rate of Dissolution of Bleached Coral in Acetic Acid	Valley Christian HS Team L **NNL03_L**	**NG-13 Launched Feburary 9 2020**	C1	CRS-20 7 Apr 2020	
147	The Effects of Microgravity on Mung Bean Transpiration Rates	Valley Christian HS Team M **NNL03_M**	**NG-13 Launched Feburary 9 2020**	D3	CRS-20 7 Apr 2020	
148	VCS Proof of concept G (XinaBox)	Valley Christian HS **NNL03_G**	**NG-13 Launched Feburary 9 2020**	Right Upper	CRS-20 7 Apr 2020	
149	VCS proof of concept N (Position Top)	Valley Christian HS **NNL03_N**	**NG-13 Launched Feburary 9 2020**	Top	CRS-20 7 Apr 2020	
150	VCS Proof of concept O (Texas A&M)	Valley Christian HS **NNL03_O**	**NG-13 Launched Feburary 9 2020**	Right Lower	CRS-20 7 Apr 2020	
2020-2021 Quest XIII SpaceX CRS-22 June 3, 2021						
151	The Effect of Microgravity on the Formation of Thermoset Plastics and The Effect of Microgravity on the Formation of Calcium Carbonate Crystals	NNL04_A Minnehaha	**SpaceX 22 June 3, 2021**	C0	10 July 2021, 03:29 UTC	

152	Zaphene: Zero G Graphene Production	NNL04_D Calvary Chapel	**SpaceX 22 June 3, 2021**	B1	10 July 2021, 03:29 UTC	
153	The effect that microgravity on brine shrimp in space	NNL04_F Singapore	**SpaceX 22 June 3, 2021**	C2	10 July 2021, 03:29 UTC	
154	Ferrofluid Heat Transfer in Microgravity	Vally Christian HS NNL04_G	**SpaceX 22 June 3, 2021**	B2	10 July 2021, 03:29 UTC	
155	The Effects of Gibberellic Acid Potassium Salt on the Rate of Seed Germination of Moth Bean seeds(Vigna aconitifolia) in Microgravity	Vally Christian HS NNL04_H	**SpaceX 22 June 3, 2021**	A1	10 July 2021, 03:29 UTC	
156	Measuring the effects of bupivacaine on membrane fluidity in microgravity	Vally Christian HS NNL04_I	**SpaceX 22 June 3, 2021**	D1-D3	10 July 2021, 03:29 UTC	
157	The Effect of Different Growth Media on Plants in a Hydroponics System in Microgravity	Vally Christian HS NNL04_J	**SpaceX 22 June 3, 2021**	D0-D2	10 July 2021, 03:29 UTC	
158	The Effects of Microgravity on 3.5% NaCl Saline Solution Induced Electrolytic Corrosion of Pure Metals	Vally Christian HS NNL04_K	**SpaceX 22 June 3, 2021**	C1	10 July 2021, 03:29 UTC	
159	Selective Diffusion of Charged Particles Through Polymeric Aqueous Two-Phase Systems (ATPS)	Vally Christian HS NNL04_L	**SpaceX 22 June 3, 2021**	A0-A2	10 July 2021, 03:29 UTC	
163	VCS Proof of concept M (XinaBox)	Vally Christian HS NNL04_M	**SpaceX 22 June 3, 2021**	Right Upper	10 July 2021, 03:29 UTC	
164	VCS proof of concept N (Position Top)	Quest Institute NNL04_N	**SpaceX 22 June 3, 2021**	B0	10 July 2021, 03:29 UTC	
165	Low Power System Monitoring O	Quest Institute NNL04_O	**SpaceX 22 June 3, 2021**	Center Left	10 July 2021, 03:29 UTC	

2021-2022 Launch Quest XIV

166	The Effect of Microgravity on the Formation of Thermoset Plastics and The Effect of Microgravity on the Formation of Calcium Carbonate Crystals	**NNL05_A Minnehaha**	**SpaceX April 27,2022 Crew 4**		20 August 2022, 18:53 UTC	
167	THE EFFECT OF MICROGRAVITY ON THE LIFETIME OF A SOAP FILM	**NNL05_B Carmel**	**SpaceX April 27,2022 Crew 4**		20 August 2022, 18:53 UTC	
168	Additive Manufacturing of a Lunar Regolith Simulant with Turbostratic Graphene, and Extrusion of the Resulting Ceramic Body Into a Cylindrical Column in Microgravity	**NNL05_C Calvary**	**SpaceX April 27,2022 Crew 4**		20 August 2022, 18:53 UTC	
169	Microbial Fuel Cell (MFC)	**NNL05_D Grand Cayon University**	**SpaceX April 27,2022 Crew 4**		20 August 2022, 18:53 UTC	
170	Cupriavidus necator	**NNL05_E Singapore**	**SpaceX April 27,2022 Crew 4**		20 August 2022, 18:53 UTC	
171	THE EFFECT OF MICROGRAVITY ON THE LIFETIME OF A SOAP FILM	**NNL05_F Carmel**	**SpaceX April 27,2022 Crew 4**		20 August 2022, 18:53 UTC	
172	Stimulated Growth of Biofilms in Microgravity to Fuel a Microbial Fuel Cell	**NNL05_G vcs**	**SpaceX April 27,2022 Crew 4**		20 August 2022, 18:53 UTC	
173	The Effects of Micro-Convection on Water Electrolysis in Microgravity	**NNL05_H vcs**	**SpaceX April 27,2022 Crew 4**		20 August 2022, 18:53 UTC	
174	Muscorum Through Lipid Concentration Under Microgravity Conditions	**NNL05_I vcs**	**SpaceX April 27,2022 Crew 4**		20 August 2022, 18:53 UTC	
175	**formations of phosphorescent dust particles under the propagative action of sound waves.**	**NNL05_J vcs**	**SpaceX April 27,2022 Crew 4**		20 August 2022, 18:53 UTC	
176	if nitrofurantoin is a good method to eradicate E-coli K-12 in microgravity	**NNL05_K vcs**	**SpaceX April 27,2022 Crew 4**		20 August 2022, 18:53 UTC	
177	Electrical Efficiency of MoS_2- and Pt- Based Materials as PECathode Catalysts in PEM Electrolysis	**NNL05_L vcs**	**SpaceX April 27,2022 Crew 4**		20 August 2022, 18:53 UTC	
178	Effect of Stressors on *Haematococcus Pluvialis* in Microgravity	**NNL05_M vcs**	**SpaceX April 27,2022 Crew 4**		20 August 2022, 18:53 UTC	
179	Yeast growth in microgravity	**NNL05_N Atlanta International**	**SpaceX April 27,2022 Crew 4**		20 August 2022, 18:53 UTC	
180	Yeast Cell Culture System Prototype HFF Silva NanoLab payload Module	**NNL05_O Quest Institute R&D**	**SpaceX April 27,2022 Crew 4**		20 August 2022, 18:53 UTC	
181	Quest R&D prototype System	**NNL05_P Quest Institute R&D**	**SpaceX April 27,2022 Crew 4**		20 August 2022, 18:53 UTC	

2022-2023 Launch NG-19 Quest XV (original scheduled February 15, 2023)

182	Comparison of Piezoelectric Crystal Growth and Resulting Piezoelectric Effect in Microgravity	**NNL06_A VCS**	**2 August 2023,00:31:14 UTC**		scheduled 2 Dec 2023	
183	Regulating Increased Iron Stores in Microgravity	**NNL06_B VCS**	**2 August 2023,00:31:14 UTC**		scheduled 2 Dec 2023	
184	Effects of Magnetic Field and pH on Ferrofluid Structure Reconfigurability	**NNL06_C VCS**	**2 August 2023,00:31:14 UTC**		scheduled 2 Dec 2023	
185	The Effects of Microgravity on Capillary Action in Millimeter-scale Lattices in Microgravity	**NNL06_D VCS**	**2 August 2023,00:31:14 UTC**		scheduled 2 Dec 2023	
186	The Effects of Endophytes on Oryza sativa Growth in Microgravity	**NNL06_E XCS**	**2 August 2023,00:31:14 UTC**		scheduled 2 Dec 2023	
187	The Effect of Microgravity and Particle Size on the Flow Rate of Emulsions	**NNL06_F VCS**	**2 August 2023,00:31:14 UTC**		scheduled 2 Dec 2023	
188	The Effects of Microgravity on Potato Decay	**NNL06_G VCS**	**2 August 2023,00:31:14 UTC**		scheduled 2 Dec 2023	
189	The Effect of Microgravity on the Ability of PETase to Break Down Plastic; and The Effect of Microgravity on the Abilitie to Move Objects	**NNL06_H Minnehaha**	**2 August 2023,00:31:14 UTC**		scheduled 2 Dec 2023	
190	Effects of Microgravity on Cyanobacteria Oxygen Production	**NNL06_I Singapore**	**2 August 2023,00:31:14 UTC**		scheduled 2 Dec 2023	
191	Printing a Simple Electrical Circuit Using Graphene	**NNL06_J Calvary**	**2 August 2023,00:31:14 UTC**		scheduled 2 Dec 2023	
192	The effects of the space environment (microgravity and radiation) on the cognitive behavior and the level of plasticity of the	**NNL06_K Atlanta**	**2 August 2023,00:31:14 UTC**		scheduled 2 Dec 2023	
193	Aeroponics in Microgravity	**NNL06_L Stony Brook**	**2 August 2023,00:31:14 UTC**		scheduled 2 Dec 2023	
194	Automated Germination of Wisconsin Fast Plants in Microgravity	**NNL06_M Juniper**	**2 August 2023,00:31:14 UTC**		scheduled 2 Dec 2023	
195	Technology demonstration System S3-40 (1)	**NNL06_N Quest Institute R&D**	**2 August 2023,00:31:14 UTC**		scheduled 2 Dec 2023	
196	Technology demonstration System S3-40 (2)	**NNL06_O Quest Institute R&D**	**2 August 2023,00:31:14 UTC**		scheduled 2 Dec 2023	
197	Technology demonstration System S3-40 (3)	**NNL06_P Quest Institute R&D**	**2 August 2023,00:31:14 UTC**		scheduled 2 Dec 2023	

2023-2024 Launch SpaceX 30 Quest XVI (Scheduled March 4, 2024)

198	Observing Microgravity Effects on Bacterial Antibiotic Resistance Evolution	**NNL07_A VCS AMSE**	**March 21, 2024 20:55UTC**		30 April 2024, 05:38 UTC	
199	The Emerson Effect in a Microgravity Environment	**NNL07_B VCS AMSE**	**March 21, 2024 20:55UTC**		30 April 2024, 05:38 UTC	
200	Temporal and Geographic Variability of the Primary Cosmic Ray Flux Rate in the International Space Station	**NNL07_C VCS AMSE**	**March 21, 2024 20:55UTC**		30 April 2024, 05:38 UTC	
201	Quantitative Efficiencies of Galvanic and Electrolytic Cells Under Microgravity Conditions	**NNL07_D VCS AMSE**	**March 21, 2024 20:55UTC**		30 April 2024, 05:38 UTC	
202	Design and test a more compact method of protein crystallization for future reference	**NNL07_E VCS AMSE**	**March 21, 2024 20:55UTC**		30 April 2024, 05:38 UTC	
203	The effect of microgravity on copper biomining efficacy of Acidithiobacillus Ferrooxidans	**NNL07_F VCS AMSE**	**March 21, 2024 20:55UTC**		30 April 2024, 05:38 UTC	
204	Test the reliability and possibility of 3D printing SLA resin in microgravity	**NNL07_G VCS AMSE**	**March 21, 2024 20:55UTC**		30 April 2024, 05:38 UTC	
205	The Effect of Microgravity on the Structural Development of Mushrooms & The Effect of Microgravity on Calcium Carbonate Crystal	**NNL07_H Minnehaha Academy**	**March 21, 2024 20:55UTC**		30 April 2024, 05:38 UTC	
206	Effects of Microgravity on Polyurethane Decompition by Pestalotiopsis Microspora	**NNL07_I Singapore American**	**March 21, 2024 20:55UTC**		30 April 2024, 05:38 UTC	
207	Reconstituting and Growing Microalgae Chlorella vulgaris Using an Autonomous Method in a Microgravity Setting	**NNL07_J Cavary Chapel**	**March 21, 2024 20:55UTC**		30 April 2024, 05:38 UTC	
208	Space environment on the cognitive behavior and the level of plasticity of the Physarum polycephalum	**NNL07_K Atlanta International**	**March 21, 2024 20:55UTC**		30 April 2024, 05:38 UTC	

209	External Stimulation of Fluids in a Microgravitational Environment	**NNL07_L Veritas Classical Adademy**	**March 21, 2024 20:55UTC**		30 April 2024, 05:38 UTC	
210	Resin 3D Printing in Microgravity	**NNL07_M Juipero Serra**	**March 21, 2024 20:55UTC**		30 April 2024, 05:38 UTC	
211	Sourdough Starter Behavior in Microgravity	**NNL07_N Swiss**	**March 21, 2024 20:55UTC**		30 April 2024, 05:38 UTC	
212	~~Multi-well Bio Lab Yeast Experiment~~	~~**NNL07_O John Hines foundation**~~	**March 21, 2024 20:55UTC**	Flight Canceled	30 April 2024, 05:38 UTC	
213	Technology demonstration System S3-40 (3)	**NNL07_P Quest R&D**	**March 21, 2024 20:55UTC**		30 April 2024, 05:38 UTC	
2024-2025 Launch NG-22 NNL08 Quest XVII September 2025 unscheduled return						
214	Separation of gases and liquids through capillary action in microgravity	**NNL08_A VCS AMSE**	**Sep-25**			
215	: Examining the Effects of Microgravity on the Corrosivity of *Aspergillus niger*	**NNL08_B VCS AMSE**	**Sep-25**			
216	analyze the effects of microgravity in the process of electro crystallization	**NNL08_C VCS AMSE**	**Sep-25**			
217	using electric field to remove bubbles within a liquid in microgravity	**NNL08_D VCS AMSE**	**Sep-25**			
218	potential of living building materials (LBMs) in space construction	**NNL08_E VCS AMSE**	**Sep-25**			
219	evaluate the effectiveness of Bacteriophage K as a disinfectant in microgravity	**NNL08_F VCS AMSE**	**Sep-25**			
220	Dynamics of foam decreasing bubble formation in microgravity	**NNL08_G VCS AMSE**	**Sep-25**			
221	Zaphend: Creation of Graphene using natural waste materials.	**NNL08_H Calvary Chapel**	**Sep-25**			
222	using photopolymer resin to create replacement parts aboard the ISS	**NNL08_I Junipero Serra High School**	**Sep-25**			
223	Flight test of Bio chambers for Quest and partner schools	**NNL08_J Hines BioLab-1**	**Sep-25**			
224	expose *Artemia* eggs to a microgravity environment observe hatching, growth, swimming.	**NNL08_K Schulkooperative Biel Switzerland**	**Sep-25**			
225	use proton exchange membrane with Shewanella oneidensis assistance	**NNL08_L BSE - Singapore American School**	**Sep-25**			
226	The Effect of Microgravity and Space Radiation on Planarian Reproduction	**NNL08_M ATLANTA INTERNATIONAL SCHOOL**	**Sep-25**			
227	effects of microgravity on Haematococcus Pluvialis' (or C. Nivalis') ability to enter oxidative stress	**NNL08_N Minnehaha Academy**	**Sep-25**			
228	Quest R&D prototype System 2nd flight	**NNL08_O Hines BioLab-2**	**Sep-25**			
229	effects that audio waves have on certain particles under a microgravity	**NNL08_P Veritas Classical Academy**	**Sep-25**			
2025-2026 Launch EARLY APR 2026 Quest XVIII						
230		**NNL09_A VCS AMSE**				
231		**NNL09_B VCS AMSE**				
232		**NNL09_C VCS AMSE**				
233		**NNL09_D VCS AMSE**				
234		**NNL09_E VCS AMSE**				

235		**NNL09_F VCS AMSE**				
236		**NNL09_G VCS AMSE**				
237		**NNL09_H**				
238		**NNL09_I**				
239		**NNL09_J**				
240		**NNL09_K**				
241		**NNL09_L**				
242		**NNL09_M**				
243		**NNL09_N**				
244		**NNL09_O**				
245		**NNL09_P**				