

STEM

SCIENCE TECHNOLOGY ENGINEERING MATH

STEM KIT	NGSS	ISTE	CSTA
Level I			
PATTERNS IN LEARNING (Artificial Intelligence)	K-2-ETS1-1, K-2-ETS1-2	Empowered Learner 1a, 1c, 1d, Innovative Designer 4a-4d, Computational Thinker 5a-5d, Creative Communicator 6a-6d	1A-CS-01, 1A-CS-03, 1A-AP-08, 1AAP 09, 1A-AP-10
STOP MOTION ANIMATION (Animation)	K-2-ETS1-1, K-2-ETS1-2, K-2- ETS1-3, K-PS2-2	Empowered Learner 1a, 1c,1d, Innovative Designer 4a-4d, Computational Thinker 5a-5d, Creative Communicator 6a-6d	1A-CS-01, 1A-CS-03, 1A-AP-08, 1AAP 09, 1A-AP-10, 1A-AP-11, 1A-AP-12, 1A-AP-14
EXPERIENCE AR AND VR (AR/VR)	K-2-ETS1-1, 2-PS1-3	Empowered Learner 1a, 1c,1d, Innovative Designer 4a-4d, Computational Thinker 5a, 5c, 5d, Creative Communicator 6a-6d	1A-CS-01, 1A-CS-02, 1A-CS-03, 1A-NI-04, 1A-AP-08, 1A-AP-10, 1A-AP-11, 1A-AP-12, 1A-AP-14, 1A-AP-15, 1A-IC-17, 1A-IC-18
CODE YOUR WORLD (Coding)	K-2-ETS1-1, K-2-ETS1-2, K-2- ETS1-3, K-PS2-2	Empowered Learner 1a, 1c-1d, Innovative Designer 4a-4d, Computational Thinker 5a-5d, Creative Communicator 6a-6d	1A-CS-01, 1A-CS-03, 1A-AP-08, 1AAP-09, 1A-AP-10, 1A-AP-11, 1A-AP-12, 1A-AP-14
CODING AWBIE WITH OSMO (Coding - POP)	K-2-ETS1-1, K-2-ETS1-2, K-2- ETS1-3, K-PS2-2	Empowered Learner 1a, 1c-1d, Knowledge Constructor 3a, Innovative Designer 4a-4c, Computational Thinker 5a-5c, Creative Communicator 6c	1A-CS-01, 1A-CS-03, 1A-AP-15
NAVIGATING CYBERSECURITY (Cybersecurity)	K-2-ETS1-1	Empowered Learner 1a, 1c, 1d, Digital Citizen 2a-2d	1A-CS-01, 1A-CS-02, 1A-CS-03, 1A-NI-04, 1A-AP-09, 1A-AP-11, 1A-AP-12, 1A-AP-15, 1A-IC-17, 1A-IC-18
DATA LAB FOUNDATIONS (Data Science)	K-2-ETS1-1	Empowered Learner 1a, 1c,1d, Computational Thinker 5a, 5b	1A-CS-01, 1A-CS-02, 1A-CS-03, 1A-DA-05, 1A-DA-06, 1A-DA-07, 1A-AP-11, 1A-AP-12, 1A-AP-13, 1A-AP-15
AERONAUTICS (Drone)	K-2-ETS1-1, K-2-ETS1-2, K-2- ETS1-3, K-PS2-2	Empowered Learner 1a, 1c, 1d, Innovative Designer 4a-4d, Computational Thinker 5a-5d, Creative Communicator 6a-6d	1A-CS-01, 1A-CS-03, 1A-AP-15
FLIGHT PLAN (Drone - POP)	K-2-ETS1-1, K-2-ETS1-2, K-2- ETS1-3, K-PS2-2	Empowered Learner 1a, 1c,1d, Innovative Designer 4a-4d, Computational Thinker 5a-5d, Creative Communicator 6a-6d	1A-CS-01, 1A-CS-03, 1A-AP-15

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Level I (continued)			
SOLVING PROBLEMS WITH SPHERO (Engineering)	K-2-ETS1-1, K-2-ETS1-2, K-2- ETS1-3, K-PS2-2	Empowered Learner 1a, 1c, 1d, Innovative Designer 4a-4d, Computational Thinker 5a-5d, Creative Communicator 6a-6d	1A-CS-01, 1A-CS-03
STORYTELLING WITH GAME DESIGN (Mobile Development)	K-2-ETS1-1, K-2-ETS1-2, K-2- ETS1-3	Empowered Learner 1a, 1c, 1d, Innovative Designer 4a-4d	1A-CS-01, 1A-CS-03, 1A-AP-08, 1A-AP-09
ROBOTS, ROBOTS EVERYWHERE (Robotics)	K-2-ETS1-1 , K-2-ETS1-2, K-2-ETS1-3, 2-PS1-3	Empowered Learner 1a, 1c,1d, Innovative Designer 4c, 4d, Creative Communicator 6b	1A-CS-01, 1A-CS-02, 1A-CS-03, 1A-AP-08, 1A-AP-11
Level II			
LEARNING WITH CONSTRAINTS (Artificial Intelligence)	3-5-ETS1-1, 2, 3	Empowered Learner 1a, 1c-1d, Knowledge Constructor 3a, Innovative Designer 4a-4c, Computational Thinker 5a-5c, Creative Communicator 6c	1B-AP-12, 1B-AP-13, 1B-AP-16
DISCOVERING ANIMATION (Animation)	3-5-ETS1-1, 2, 3	Empowered Learner 1a, 1c-1d, Thinker 5a, Creative Communicator 6c, Innovative Designer 4b	1B-CS-02, 1B-NI-04, 1B-AP-10, 1B-AP-11, 1B-AP-16
EXPLORING AR AND VR (AR/VR)	3-5-ETS1-1, 3-5-ETS1-2, 3-5-ETS1-3	Empowered Learner 1a,1c,1d, Knowledge Constructor 3d, Innovative Designer 4a-4d, Computational Thinker 5a, 5c, 5d, Creative Communicator 6a-6d	1B-AP-08,1B-AP-09, 1B-AP-11, 1B-AP-12, 1B-AP-13, 1B-AP-15, 1B-AP-16, 1B-IC-18
CODING WITH COLOR (Level II)	3-5-ETS1-1, 3-5-ETS1-2, 4-PS4-3	Empowered Learner 1a, 1c-1d, Digital Citizen 2b, Knowledge Constructor 3d, Innovative Designer 4b, Computational Thinker 5a, Creative Communicator 6c, 6d, Global Collaborator 7d	1B-AP-09, 1B-AP-10, 1B-AP-13, 1B-AP-15, 1B-AP17
MORE CODING FUN WITH OZOBOT (Coding - POP)	3-5-ETS1-1, 3-5-ETS1-2, 4-PS4-3 3-5-ETS1-1, 3-5-ETS1-2, 4-PS4-3, 5-LS2-1	Empowered Learner 1a, 1c-1d, Digital Citizen 2b, Knowledge Constructor 3d, Innovative Designer 4b, Computational Thinker 5a, Creative Communicator 6c, 6d, Global Collaborator 7d	1B-AP-09, 1B-AP-10, 1B-AP-13, 1B-AP-15, 1B-AP-17
SAFEGUARDING INFORMATION (Cybersecurity)	4-PS4-3, 5-ESS3-1	Empowered Learner 1a, 1c-1d, Knowledge Constructor 3a, Innovative Designer 4a-4c, Computational Thinker 5a-5c, Creative Communicator 6c	1B-CS-03, 1B-AP-10, 1B-AP16
DATA OBSERVATIONS (Data Science)	4-PS3-4, 3-5-ETS1-1, 3-5-ETS1-3, 3-PS2-3, 3-PS2-4, 4-PS3-2, 3-ESS2-1	Empowered Learner 1c, Knowledge Constructor 3a, 3c, Innovative Designer 4a, 4b, 4c, 4d, Creative Communicator 6b, 6c, 6d	1B-DA-06, 1B-DA-07

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Level II (continued)			
PREPARE FOR FLIGHT (Drone)	3-5-ETS1-1, 3-5-ETS1-2, 3-5-ETS1-3, 3-PS2-2, 4-PS4-3	Empowered Learner 1a, 1c-1d, Digital Citizen 2b, Knowledge Constructor 3a, Innovative Designer 4a-4c, Comput. Thinker 5a-5c, Creative Communicator 6c, Global Collaborator 7c	1B-CS-03, 1B-AP-10, 1B-AP16
OLYMPICS CHALLENGE (Drone-POP)	3-5-ETS1-1, 2, 3, 4-PS4-3	Empowered Learner 1a, 1c-1d, Knowledge Constructor 3a, Innovative Designer 4a-4c, Computational Thinker 5a-5c, Creative Communicator 6c	1B-CS-03, 1B-AP-10, 1B-AP16
SPHERO PLAYGROUND (Level II)	3-PS2-1, 3-PS2-2, 3-5-ETS1-1, 3-5-ETS1-2, 3-5-ETS1-3, 4-PS3-1, 4-PS3-3	Computational Thinker- 5b, Creative Communicator- 6b and 6d	1B-DA-06, 1B-DA-07, 1B-AP-10, 1B-AP-11, 1B-AP-16
3D PRINTING: DESIGN, PRINT, UNLOCK, IMAGINATION (Engineering)	3-ESS3-1, 3-5-ETS1-1	Empowered Learner 1a, 1c-1d, Digital Citizen 2b, Knowledge Constructor 3d, Computational Thinker 5a, Creative Communicator 6c	1B-CS-03, 1B-AP-08, 1B-AP-15, 1B-AP-16
SPHERO PLAYGROUND (Engineering - POP)	3-5-ETS1-1, 3-5-ETS1-2, 3-5-ETS1-3, 3-PS2-1, 3-PS2-2, 4-PS3-1, 4-PS3-3.	Computational Thinker 5b, Creative Communicator 6b, 6d	1B-DA-06, 1B-DA-07, 1B-AP-10, 1B-AP-11, 1B-AP-16
GAME BASED CHARACTER DEVELOPMENT (Mobile Development)	3-ESS2-1, 3-ESS2-2, 3-5-ETS1-1, 3-5-ETS1-2, 3-5-ETS1-3, 3-LS2-1, 5-LS2-1	Knowledge Constructor 3a-3d, Innovative Designer 4a-4d, Creative Communicator 6a-6d	1B-CS-01, 1B-CS-02, 1B-IC-18, 1B-NI-04
DESIGNING ROBOTS (Robotics)	3-5-ETS1-1, 2, 3	Empowered Learner 1a, 1c-1d, Thinker 5a, Creative Communicator 6c, Innovative Designer 4b	1B-CS-01, 1B-DA-07, 1B-IC-18, 1B-AP-16
Level III			
CREATION OF ARTIFICIAL INTELLIGENCE (Artificial Intelligence)	MS-ETS1-1, 1-2, 103, 1-4	Empowered Learner 1a, 1b, 1c, 1d, Innovative Designer 4a, 4b, 4c, 4d, Computational Thinker 5a, 5c, Creative Communicator 6c, Global Collaborator 7c	2-CS-0, 2-CS-02, 2-CS-03, 2-DA-09, 2-AP-13, 2-AP-15
ANIMATION STATION (Animation)	MS-PS4-3	Empowered Learner 1a, 1b, 1c, 1d, Innovative Designer 4b, Creative Communicator 6c, Global Collaborator 7c	2-AP-13, 2-AP-16, 2-IC-22
CREATING AR AND VR EXPERIENCES (AR/VR)	MS-LS2-4, MS-LS2-5	Empowered Learner 1a, 1b, 1c, 1d, Knowledge Constructor 3a, 3c, 3d, Creative Communicator 6c, Global Collaborator 7c, 7d	2-CS-02

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Level III (continued)			
COMMUNICATION, CODING, AND MINI SPHERO (Level III)	MS-ETS1-1, MS-ETS1-2, MS-ETS1-3, MS-ETS1-4, MS-PS2-2, MS-PS4-3	Innovative Designer 4a-4d, Computational Thinker 5c5d, Creative Communicator 6a-6d	2-AP-12, 2-AP-13, 2-AP-16
SPHERO MINI THROUGH NATIONAL PARKS (Level III)	MS-ETS1-1, MS-ETS1-2, MS-ETS1-3	Knowledge Constructor- 3a, Innovative Designer- 4a, 4b, 4c, 4d, Computational Thinker- 5d, Creative Communicator- 6b, and 6d	2-AP-13, 2-AP-15, 2-AP-17
CRYPTOGRAPHY FOUNDATIONS (Cybersecurity)	MS-PS4-3	Empowered Learner 1c, Digital Citizen 2a, 2b	2-NI-05
QUALIFIED FOR FLIGHT (Drone)	MS-ETS1-1, MS-ETS1-4	Empowered Learner 1a, 1c-1d, Digital Citizen 2b, Knowledge Constructor 3a, Innovative Designer 4a-4c, Computational Thinker 5a-5c, Creative Communicator 6c, Global Collaborator 7c	2-CS-03, 2-AP-15
DEPLOY YOUR DRONE (Drone)	MS-ETS1-1	Emp. Learner 1a, 1c-d, Knowledge Constructor 3a-3d, Innovative Designer 4a-4d, Computational Thinker 5a-5d, Creative Communicator 6a-6d	2-DA-08
NATURAL DISASTER (Drone - POP)	MS-ETS1-1, MS-ETS1-2, MS-ETS1-3, MS-ETS1-4	Empowered Learner 1a, 1c, 1d, Digital Citizen 2c, Knowledge Constructor 3a, 3b, 3d, Innovative Designer 4a-4d, Computational Thinker 5a-5c, Creative Communicator 6a-6d, Global Communicator 7b-7d	2-AP-15, 2-AP-18
3D PRINTING: PATHWAY TO PURPOSEFUL ENGAGEMENT (Level III)	MS-ETS1-1, MS-ETS1-3, MS-ETS1-4	Knowledge Constructor 3a-3c, Innovative Designer 4a4d, Creative Communicator 6a-6c	2-AP-15, 2-CS-02, 2-IC-20
BIG DATA, BIG IDEAS (Data Science)	MS-ESS3-2	Empowered Learner 1a, 1c, 1d, Knowledge Constructor 3a-3c, Computational Thinker 5a-5d, Creative Communicator 6a-6d	2-NI-04, 2-DA-08, 2-AP-13, 2-AP-17, 2-AP-18, 2-AP-19
DRONES: READY FOR FLIGHT (Level III)	MS-ETS1-1, MS-ETS1-4	Empowered Learner 1a, 1c-1d, Digital Citizen 2b, Knowledge Constructor 3a, Innovative Designer 4a-4c, Comput. Thinker 5a-5c, Creative Comm. 6c, Global Coll. 7c	2-CS-03, 2-AP-15

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Level III (continued)			
DEPLOY DRONE: BUILD YOUR DRONE (Level III)	MS-ETS1-1	Emp. Learner 1a, 1c-d, Knowledge Constructor 3a-3d, Inn. Designer 4a-4d; Comput. Thinker 5a-5d; Creat. Comm. 6a-6d	2-DA-08
THE SCIENCE OF DRONE RACING (Drone)	MS-ETS1-1	Empowered Learner 1a, 1c, 1d, Knowledge Constructor 3a-3d, Innovative Designer 4a-4d, Computational Thinker 5a-5d	2-CS-03, 2-AP-15, 2-AP-17
3D PRINTING: A PATHWAY TO PURPOSEFUL PRINTING (Engineering)	MS-ETS1-1, MS-ETS1-3, MS-ETS1-4	Knowledge Constructor 3a-3c, Innovative Designer 4a, 4d, Creative Communicator 6a-6c	2-AP-15, 2-CS-02, 2-IC-20
CYBERSECURITY (Level III)	MS-PS4-3	Empowered Learner 1c, Digital Citizen 2a,2b,2b	2-NI-05
CREATING MEANINGFUL APPS (Mobile Development)	MS-ETS1-1, MS-ETS1-4, MS-PS2-2	Knowledge Constructor 3a-3d, Innovative Designer 4a-4d, Creative Communicator 6a-6d	2-AP-12, 2-AP-15, 2-NI-06,
ROBOTS WITH A PURPOSE (Robotics)	MS-ETS1-1, 1-2, 103, 1-4	Empowered Learner 1a, 1b, 1c, 1d, Innovative Designer 4a, 4b, 4c, 4d, Computational Thinker 5a, 5c, Creative Communicator 6c, Global Collaborator 7c	1A-AP-10, 3A-AP-18, 3B-AP-09, 1B-CS-01, 1B-DA-07, 1B-IC-18
Level IV			
TRAINING ARTIFICIAL INTELLIGENCE (Artificial Intelligence)	HS-ETS1-2	Empowered Learner 1a, 1c, 1d, Digital Citizen 2a-2d, Knowledge Constructor 3a-3d, Innovative Designer 4a-4d, Computational Thinker 5a-5d, Creative Communicator 6a-6d	3A-CS-03, 3A-AP-18, 3A-IC-24
ANYONE CAN ANIMATE! (Animation)	HS-ETS1-2	Empowered Learner 1a, 1c, 1d, Digital Citizen 2b, Knowledge Constructor 3c, Innovative Designer 4a-4d, Computational Thinker 5c, Creative Communicator 6b-6d, Global Communicator 7c	3A-CS-03, 3A-AP-16, 3A-AP-17, 3A-AP-18
AUGMENTED AND VIRTUAL REALITY WORLDS (AR/VR)	HS-ETS1-2, HS-ETS1-4	Empowered Learner 1a, 1c, 1d, Digital Citizen 2b-2d, Knowledge Constructor 3a, 3c, 3d, Innovative Designer 4a-4d, Computational Thinker 5a, 5c, Creative Communicator 6a-6d, Global Communicator 7c	3A-CS-03, 3A-AP-16, 3A-AP-18, 3A-AP-19, 3A-AP-21, 3A-IC-24, 3B-CS-02, 3B-AP-21

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Level IV (continued)			
COMBINED CODING FOUNDATIONS AND SKILLS (Coding)	HS-ETS1-2, HS-ETS1-3, HS-ETS1-4	Empowered Learner 1a,1c,1d, Digital Citizen 2d, Knowledge Constructor 3d, Innovative Designer 4b, 4d, Computational Thinker 5a, Creative Communicator 6c, 6d, Global Collaborator 7c	3A-CS-03, 3A-AP-14, 3B-CS-01, 3B-CS-02
CODING FOUNDATIONS (Level III)	HS-ETS1-2, HS-ETS1-3, HS-ETS1-4	Empowered Learner 1a, 1c-1d, Digital Citizen 2b, Knowledge Constructor 3d, Innovative Designer 4b, 4d, Comput. Thinker 5a, Creative Comm. 6c,6d, Global Coll. 7c	3A-CS-03, 3A-AP-14, 3B-CS-01, 3B-CS-02
ACQUIRING CODING SKILLS (Coding - POP)	HS-ETS1-2	Empowered Learner 1a,1c,1d, Innovative Designer 4b, 4d, Computational Thinker 5a	3A-CS-03, 3A-AP-14
PROTECTING PERSONAL PRIVACY (Cybersecurity)	HS-ETS1-1, HS-ETS1-2	Empowered Learner 1c, Digital Citizen 2a,2b,2b, Global Collaborator 7c	3A-NI-06, 3A-NI-07, 3A-NI-08, 3A-IC-24, 3B-AP-18
DATA LITERACY AND VISUALIZATIONS (Data Science)	HS-ETS1-1, HS-ETS1-2, HS-ETS1-3	Empowered Learner 1a, 1c, 1d, Digital Citizen 2a-2d, Knowledge Constructor 3a-3d, Innovative Designer 4a-4d, Computational Thinker 5a-5c, Creative Communicator 6a-6d, Global Communicator 7b-7d	3A-CS-03, 3A-DA-11, 3A-DA-12, 3A-AP-16, 3A-AP-18, 3A-IC-24, 3B-AP-14
CERTIFIED FOR FLIGHT (Drone)	HS-ETS1-2, HS-ETS1-3, HS-ETS1-4	Empowered Learner 1a, 1c-1d, Digital Citizen 2b, Knowledge Constructor 3d, Innovative Designer 4b, 4d, Computational Thinker 5a, 5c, Creative Communicator 6c,6d, Global Collaborator 7c	3A-CS-03, 3A-DA-11, 3A-DA-12, 3A-AP-13, 3A-AP-16, 3A-AP-17, 3A-AP-18
3D PRINTING CHALLENGE: SOLVING A REAL-WORLD PROBLEM (Level III)	HS-ETS1-2, HS-ETS1-3, HS-ETS1-4	Empowered Learner 1a, 1c-1d, Digital Citizen 2b, Knowledge Constructor 3d, Innovative Designer 4b, 4d, Comput. Thinker 5a, 5c, Creative Comm. 6c,6d, Global Coll. 7c	3A-CS-03, 3A-DA-11, 3A-DA-12, 3A-AP-13, 3A-AP-16, 3A-AP-17, 3A-AP-18
APP BUILDING BASICS (Mobile Development)	HS-ETS1-2, HS-ETS1-3, HS-ETS1-4	Empowered Learner 1a, 1c, 1d, Digital Citizen 2b, Knowledge Constructor 3a-3d, Innovative Designer 4a-4d, Computational Thinker 5a, 5c, Creative Communicator 6a-6d	3A-AP-13, 3A-AP-16, 3A-AP-17, 3A-AP-18, 3A-AP-19, 3A-AP-21, 3B-AP-10, 3B-AP-11, 3B-AP-15, 3B-AP-21, 3B-AP-23, 3B-AP-24
ROBOT LAB (Robotics)	HS-ETS1-2	Empowered Learner 1a, 1c, 1d, Innovative Designer 4a-4d, Computational Thinker 5a, 5c, 5d, Creative Communicator 6a-6d,	3A-CS-03, 3A-AP-13, 3B-CS-02