

Pennsylvania STEELS Crosswalk Alignment

Alignment of Rocket Drones Curriculum to PA STEELS Standards

PA STEELS Physical Science | PA STEELS Technology and Engineering

Course	Course Title	Activity Title	Activity Subtitle	PA STEELS Standards
Curriculum	2026 Intro to Drones (Middle/High)	Lesson 1-01: Characteristics of Drones	Aerial drones	3.5.3-5.A 3.5.3-5.DD
Curriculum	2026 Intro to Drones (Middle/High)	Lesson 1-02: Characteristics of Drones	Quiz: Aerial drones Comprehension	3.5.3-5.A 3.5.3-5.DD
Curriculum	2026 Intro to Drones (Middle/High)	Lesson 1-03: Characteristics of Drones	Ground-Based Drones	3.5.3-5.DD 3.5.3-5.J 3.5.6-8.AA
Curriculum	2026 Intro to Drones (Middle/High)	Lesson 1-04: Characteristics of Drones	Water-Based Drones	3.5.3-5.DD 3.5.3-5.J 3.5.6-8.AA
Curriculum	2026 Intro to Drones (Middle/High)	Lesson 1-05: Characteristics of Drones	Explore: Exploring Further Into Drones	
Curriculum	2026 Intro to Drones (Middle/High)	Lesson 1-06: Characteristics of Drones	Article # 1: North Carolina's Civil Air Patrol Invests in 10 New Drones for Emergency Management	
Curriculum	2026 Intro to Drones (Middle/High)	Lesson 1-07: Characteristics of Drones	Quiz: Article 1	
Curriculum	2026 Intro to Drones (Middle/High)	Lesson 1-08: Characteristics of Drones	Article # 2 - Zipline drone delivers a shipment in Rwinkwavu, Rwanda on June 30, 2022.	3.5.9-12.E
Curriculum	2026 Intro to Drones (Middle/High)	Lesson 1-09: Characteristics of Drones	Quiz: Article 2	
Curriculum	2026 Intro to Drones (Middle/High)	Lesson 1-10: Characteristics of Drones	Article # 3 These drones are swallowing tons of plastic waste before it reaches the ocean	
Curriculum	2026 Intro to Drones (Middle/High)	Lesson 1-11: Characteristics of Drones	Quiz: Article 3	
Curriculum	2026 Intro to Drones (Middle/High)	Lesson 1-12: Characteristics of Drones	Optional Activities - Aerial Drones - Make a Hover Craft	3.2.K.A 3.2.3.B 3.5.3-5.C
Curriculum	2026 Intro to Drones (Middle/High)	Lesson 2-01: The History of Aerial Drones	The History of Aerial Drones	3.5.3-5.DD 3.5.3-5.X 3.5.9-12.BB 3.5.9-12.F
Curriculum	2026 Intro to Drones (Middle/High)	Lesson 2-02: The History of Aerial Drones	Quiz: History of Aerial Drones	3.5.3-5.DD 3.5.3-5.X 3.5.9-12.BB 3.5.9-12.F
Curriculum	2026 Intro to Drones (Middle/High)	Lesson 2-03: The History of Aerial Drones	Explore 1: The Evolution of Drones	3.5.3-5.DD 3.5.3-5.X 3.5.9-12.BB 3.5.9-12.F 3.5.9-12.KK
Curriculum	2026 Intro to Drones (Middle/High)	Lesson 2-04: The History of Aerial Drones	Explore 2: Drone Timeline	3.5.3-5.DD 3.5.3-5.X 3.5.9-12.BB 3.5.9-12.GG 3.5.9-12.JJ
Curriculum	2026 Intro to Drones (Middle/High)	Lesson 2-05: The History of Aerial Drones	Article 1: Medical Deliveries by Drone in Australia	3.5.9-12.E
Curriculum	2026 Intro to Drones (Middle/High)	Lesson 2-06: The History of Aerial Drones	Quiz: Article 1	
Curriculum	2026 Intro to Drones (Middle/High)	Lesson 2-07: The History of Aerial Drones	Article 2: Autonomous Seed-Shooting Drones Can Plant 40,000 Trees a Day	3.4.9-12.A
Curriculum	2026 Intro to Drones (Middle/High)	Lesson 2-08: The History of Aerial Drones	Quiz: Article 2	3.4.9-12.A
Curriculum	2026 Intro to Drones (Middle/High)	Lesson 2-09: The History of Aerial Drones	Article 3: Study on Drones and Desert Locusts	3.4.9-12.A
Curriculum	2026 Intro to Drones (Middle/High)	Lesson 2-10: The History of Aerial Drones	Quiz: Article 3	3.4.9-12.A
Curriculum	2026 Intro to Drones (Middle/High)	Lesson 2-11: The History of Aerial Drones	Article 4: Drones:Fighting Poaching in Africa	
Curriculum	2026 Intro to Drones (Middle/High)	Lesson 2-12: The History of Aerial Drones	Quiz: Article 4	

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Curriculum	2026 Intro to Drones (Middle/High)	Lesson 2-13: The History of Aerial Drones	Optional Activities - Museum of the History of Flight - Make a Walking Museum of Flight	3.5.3-5.C 3.5.3-5.D 3.5.3-5.X 3.5.6-8.BB 3.5.6-8.F
Curriculum	2026 Intro to Drones (Middle/High)	Lesson 3-01: How Drones Fly	How Drones Fly	3.2.9-12.I 3.5.3-5.GG
Curriculum	2026 Intro to Drones (Middle/High)	Lesson 3-02: How Drones Fly	Extend: Newton's Laws of Motion	3.2.9-12.I 3.5.3-5.GG
Curriculum	2026 Intro to Drones (Middle/High)	Lesson 3-03: How Drones Fly	Quiz: Newton's Laws	3.2.9-12.I 3.5.3-5.GG
Curriculum	2026 Intro to Drones (Middle/High)	Lesson 3-04: How Drones Fly	Extend: Bernoulli's Principle	3.2.9-12.I 3.5.3-5.GG
Curriculum	2026 Intro to Drones (Middle/High)	Lesson 3-05: How Drones Fly	Quiz - Bernoulli's Principle	3.2.9-12.I 3.5.3-5.GG
Curriculum	2026 Intro to Drones (Middle/High)	Lesson 3-06: How Drones Fly	Explore: Investigating Bernoulli's Principle and Lift	3.5.3-5.GG
Curriculum	2026 Intro to Drones (Middle/High)	Lesson 3-07: How Drones Fly	Article 1: Drones Navigate Unseen Environments with Liquid Neural Networks	
Curriculum	2026 Intro to Drones (Middle/High)	Lesson 3-08: How Drones Fly	Quiz: Article 1	
Curriculum	2026 Intro to Drones (Middle/High)	Lesson 3-09: How Drones Fly	Article 2: Drones to the Rescue	3.5.9-12.E
Curriculum	2026 Intro to Drones (Middle/High)	Lesson 3-10: How Drones Fly	Quiz: Article 2	
Curriculum	2026 Intro to Drones (Middle/High)	Lesson 3-11: How Drones Fly	Optional Activities - Drone Propellers - Make and Test an Airfoil	3.2.K.A 3.2.3.B 3.2.6-8.H 3.2.9-12.I 3.2.9-12.K 3.5.3-5.C 3.5.6-8.Q
Curriculum	2026 Intro to Drones (Middle/High)	Lesson 3-12: How Drones Fly	Quiz: How Drones Fly	
Curriculum	2026 Intro to Drones (Middle/High)	Lesson 4-01: Anatomy of an Aerial Drone	Anatomy of an Aerial Drone	
Curriculum	2026 Intro to Drones (Middle/High)	Lesson 4-02: Anatomy of an Aerial Drone	Quiz: Understanding Drones	
Curriculum	2026 Intro to Drones (Middle/High)	Lesson 4-03: Anatomy of an Aerial Drone	Extend: DC Motors	3.2.9-12.M
Curriculum	2026 Intro to Drones (Middle/High)	Lesson 4-04: Anatomy of an Aerial Drone	Quiz - DC Motors	3.2.9-12.M
Curriculum	2026 Intro to Drones (Middle/High)	Lesson 4-05: Anatomy of an Aerial Drone	Extend: How a Battery Works	3.5.3-5.F
Curriculum	2026 Intro to Drones (Middle/High)	Lesson 4-06: Anatomy of an Aerial Drone	Quiz - Batteries	3.5.3-5.F
Curriculum	2026 Intro to Drones (Middle/High)	Lesson 4-07: Anatomy of an Aerial Drone	Explore: Dissecting a Drone	
Curriculum	2026 Intro to Drones (Middle/High)	Lesson 4-08: Anatomy of an Aerial Drone	Article 1: Recent Drone Cybersecurity Developments Could Lead to Fewer Attacks in 2023	
Curriculum	2026 Intro to Drones (Middle/High)	Lesson 4-09: Anatomy of an Aerial Drone	Quiz: Article 1	
Curriculum	2026 Intro to Drones (Middle/High)	Lesson 4-10: Anatomy of an Aerial Drone	Article 2 Mass-market military drones: 10 Breakthrough Technologies 2023	
Curriculum	2026 Intro to Drones (Middle/High)	Lesson 4-11: Anatomy of an Aerial Drone	Quiz: Article 2	
Curriculum	2026 Intro to Drones (Middle/High)	Lesson 4-12: Anatomy of an Aerial Drone	Optional Activities - The Frame Up - Design and build aPrototype of a Drone Frame	3.2.K.A 3.5.3-5.C 3.5.3-5.Q 3.5.3-5.R 3.5.3-5.T 3.5.6-8.Q
Curriculum	2026 Intro to Drones (Middle/High)	Lesson 5-01: Applications of Drones	Applications of Drones	
Curriculum	2026 Intro to Drones (Middle/High)	Lesson 5-02: Applications of Drones	Quiz on Drones	
Curriculum	2026 Intro to Drones (Middle/High)	Lesson 5-03: Applications of Drones	Extend: Drone Delivery	

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Curriculum	2026 Intro to Drones (Middle/High)	Lesson 5-04: Applications of Drones	Quiz - Drone Delivery	
Curriculum	2026 Intro to Drones (Middle/High)	Lesson 5-05 Applications of Drones	Explore: Drones in the Workplace	3.5.3-5.D
Curriculum	2026 Intro to Drones (Middle/High)	Lesson 5-06: Applications of Drones	Article 1: A Drone Flew a Human Lung Across Toronto for Emergency Transplant	3.5.9-12.E
Curriculum	2026 Intro to Drones (Middle/High)	Lesson 5-07: Applications of Drones	Quiz: Article 1	
Curriculum	2026 Intro to Drones (Middle/High)	Lesson 5-08: Applications of Drones	Article 2: Drones help farmers monitor their fields	3.4.9-12.A
Curriculum	2026 Intro to Drones (Middle/High)	Lesson 5-09: Applications of Drones	Quiz: Article 2	3.4.9-12.A
Curriculum	2026 Intro to Drones (Middle/High)	Lesson 5-10: Applications of Drones	Article 3: Upstate uses drones to deliver medications to campus for Meds to Beds program	3.5.9-12.E
Curriculum	2026 Intro to Drones (Middle/High)	Lesson 5-11: Applications of Drones	Quiz: Article 3	
Curriculum	2026 Intro to Drones (Middle/High)	Lesson 5-12: Applications of Drones	Optional Activities - Career Investigation - Write a Flight Plan	3.5.3-5.C
Curriculum	2026 Intro to Drones (Middle/High)	Lesson 6-01: Careers in Uncrewed Systems	Careers in Uncrewed Systems	
Curriculum	2026 Intro to Drones (Middle/High)	Lesson 6-02: Careers in Uncrewed Systems	Quiz: Careers in Uncrewed Systems	
Curriculum	2026 Intro to Drones (Middle/High)	Lesson 6-03: Careers in Uncrewed Systems	Explore: Careers with Drones	
Curriculum	2026 Intro to Drones (Middle/High)	Lesson 6-04: Careers in Uncrewed Systems	Extend: Starting a Drone Business	
Curriculum	2026 Intro to Drones (Middle/High)	Lesson 6-05: Careers in Uncrewed Systems	Optional - A Drone Business - Create a business plan	
Curriculum	2026 Intro to Drones (Middle/High)	Lesson 6-06: Careers in Uncrewed Systems	Article 1: How Drones Are Changing the Business World	
Curriculum	2026 Intro to Drones (Middle/High)	Lesson 6-07: Careers in Uncrewed Systems	Quiz: Article 1	
Curriculum	2026 Intro to Drones (Middle/High)	Lesson 6-08: Careers in Uncrewed Systems	Article 2: Will 2023 Prove to be the Pivotal Year for Drone Delivery?	
Curriculum	2026 Intro to Drones (Middle/High)	Lesson 6-09: Careers in Uncrewed Systems	Quiz: Article 2	
Curriculum	2026 Intro to Drones (Middle/High)	Lesson 7-01: Drone Safety and Regulation	Drone Safety and Regulation	
Curriculum	2026 Intro to Drones (Middle/High)	Lesson 7-02: Drone Safety and Regulation	Quiz: Drone Safety and Regulation	
Curriculum	2026 Intro to Drones (Middle/High)	Lesson 7-03: Drone Safety and Regulation	Explore: Understanding Airspace	
Curriculum	2026 Intro to Drones (Middle/High)	Lesson 7-04: Drone Safety and Regulation	Article 1: North Carolina's First Drone as First Responder Program: Forsyth County Partners with AeroX	
Curriculum	2026 Intro to Drones (Middle/High)	Lesson 7-05: Drone Safety and Regulation	Quiz: Article 1	
Curriculum	2026 Intro to Drones (Middle/High)	Lesson 7-06: Drone Safety and Regulation	Article 2: University Drone Racing League Flies into Simulation Series	
Curriculum	2026 Intro to Drones (Middle/High)	Lesson 7-07: Drone Safety and Regulation	Quiz: Article 2	
Curriculum	2026 Intro to Drones (Middle/High)	Lesson 7-08: Drone Safety and Regulation	Optional ELA/Social Studies	

Course	Course Title	Activity Title	Activity Subtitle	PA STEELS Standards
Curriculum	2026 Intro to Drones (Middle/High)	Lesson 8-01: Obtain Your FAA TRUST Certificate	Get FAA Recreational Drone Certified	
Curriculum	2026 Intro to Drones (Middle/High)	Lesson 8-02: Obtain Your FAA TRUST Certificate	Article 1: Drones for Whale Research	
Curriculum	2026 Intro to Drones (Middle/High)	Lesson 8-03: Obtain Your FAA TRUST Certificate	Quiz: Article 1	
Curriculum	2026 Intro to Drones (Middle/High)	Lesson 8-04: Obtain Your FAA TRUST Certificate	Optional ELA/Social Studies	
Curriculum	2026 Intro to Drones (Middle/High)	Lesson 9-01: Drones & Careers in the US Space Force	Introduction to the US Space Force	
Curriculum	2026 Intro to Drones (Middle/High)	Lesson 9-02: Drones & Careers in the US Space Force	Quiz: US Space Force	
Curriculum	2026 Intro to Drones (Middle/High)	Lesson 9-03: Drones & Careers in the US Space Force	Drone Technology's Connection to Space Systems	
Curriculum	2026 Intro to Drones (Middle/High)	Lesson 9-04: Drones & Careers in the US Space Force	Quiz: Drone Technology	
Curriculum	2026 Intro to Drones (Middle/High)	Lesson 9-05: Drones & Careers in the US Space Force	Unmanned Systems in Space Force Operations	
Curriculum	2026 Intro to Drones (Middle/High)	Lesson 9-06: Drones & Careers in the US Space Force	Quiz: Unmanned Systems	
Curriculum	2026 Intro to Drones (Middle/High)	Lesson 9-07: Drones & Careers in the US Space Force	Cybersecurity in US Space Force Careers	
Curriculum	2026 Intro to Drones (Middle/High)	Lesson 9-08: Drones & Careers in the US Space Force	Quiz: Cybersecurity	
Curriculum	2026 Intro to Drones (Middle/High)	Lesson 9-09: Drones & Careers in the US Space Force	Drones and Unmanned Systems: Careers in the U.S. Space Force	
Curriculum	2026 Intro to Drones (Middle/High)	Lesson 9-10: Drones & Careers in the US Space Force	Educational & Career Pathways Into the Space Force	
Curriculum	2026 Intro to Drones (Middle/High)	Lesson 9-11: Drones & Careers in the US Space Force	Future Trends in Space-Based Unmanned Systems	3.5.9-12.NN
Curriculum	2026 Intro to Drones (Middle/High)	Lesson 9-12: Drones & Careers in the US Space Force	Quiz: Drones and Unmanned Systems	
Curriculum	2026 Intro to Drones (Middle/High)	Lesson 9-13: Drones & Careers in the US Space Force	Quiz: Educational & Career Pathways	
Curriculum	2026 Intro to Drones (Middle/High)	Lesson 9-14: Drones & Careers in the US Space Force	Quiz: Future Trends	3.5.9-12.NN
Web Simulation	Classroom (Mission)	How to Fly	Tutorial	3.5.3-5.C 3.5.6-8.K
Web Simulation	Classroom (Mission)	Troubleshooting	Tutorial	3.5.3-5.BB 3.5.3-5.C 3.5.6-8.J 3.5.9-12.MM 3.5.9-12.O
Web Simulation	Classroom (Mission)	Follow the Leader	Tutorial	3.5.3-5.C
Web Simulation	Classroom (Mission)	Drone Delivery	Tutorial	3.5.3-5.C

Course	Course Title	Activity Title	Activity Subtitle	PA STEELS Standards
Web Simulation	Classroom (Mission)	Search and Rescue	Tutorial	3.5.3-5.C
Web Simulation	Classroom (Mission)	Dynamic Landing	Tutorial	3.5.3-5.C
Web Simulation	Classroom (Mission)	Dynamic Obstacles	Tutorial	3.5.3-5.C
Web Simulation	Classroom (Mission)	Prop Wash Gym	Tutorial	3.5.3-5.C
Web Simulation	Classroom (Mission)	Sensors	Tutorial	3.5.3-5.C
Web Simulation	Classroom (Game)	Balloon Pop	Tutorial	3.5.3-5.C
Web Simulation	Classroom (Game)	Drone Limbo	Tutorial	3.5.3-5.C
Web Simulation	Classroom (Game)	Musical Drones	Tutorial	3.5.3-5.C
Web Simulation	Classroom (Game)	Basket Ball Shootout	Tutorial	3.5.3-5.C
Web Simulation	Classroom (Game)	Relay	Tutorial	3.5.3-5.C
Web Simulation	Classroom (Game)	Pong	Tutorial	3.5.3-5.C
Web Simulation	Classroom (Game)	Drone Fishing	Tutorial	3.5.3-5.C
Web Simulation	Classroom (Game)	Build & Fly Class	Tutorial	3.5.3-5.C
Web Simulation	Classroom (Game)	Racing	Tutorial	3.5.3-5.C
Classroom Drone	How to Fly	Step 1: Introduction		
Classroom Drone	How to Fly	Video: Drone and Controller Brief		3.5.6-8.K
Classroom Drone	How to Fly	Step 2: Classroom Rover Drone		3.5.3-5.C 3.5.6-8.K
Classroom Drone	How to Fly	Video: Drone Basic Flight		3.5.6-8.K
Classroom Drone	How to Fly	Step 3: Basic Flight Control		3.5.3-5.C 3.5.6-8.K
Classroom Drone	How to Fly	Video: Drone Battery Safety		
Classroom Drone	How to Fly	Step 4: Batteries		3.5.3-5.C
Classroom Drone	How to Fly	Video: Classroom Drone Safety	Video #1	
Classroom Drone	How to Fly	Video: Classroom Drone Unboxing	Video #2	
Classroom Drone	How to Fly	Video: Classroom Drone and Controller Brief	Video #3	3.5.6-8.K
Classroom Drone	How to Fly	Video: Classroom Drone Arm the Motors	Video #4	3.5.6-8.K
Classroom Drone	How to Fly	Video: Classroom Drone Basic Flight	Video #5	3.5.6-8.K
Classroom Drone	How to Fly	Video: Classroom Drone Battery Charging	Video #6	
Classroom Drone	How to Fly	Video: Classroom Drone Battery Safety	Video #7	
Classroom Drone	How to Fly	Video: Classroom Drone Charging the Remote	Video #8	
Classroom Drone	How to Fly	Video: Classroom Drone Troubleshooting Drifting Drone	Video #9	3.5.3-5.BB 3.5.6-8.J 3.5.9-12.MM 3.5.9-12.O
Classroom Drone	How to Fly	Video: Classroom Drone Drift Trim	Video #10	3.5.6-8.K
Classroom Drone	How to Fly	Video: Classroom Drone Land and Disarm	Video #11	3.5.6-8.K

Course	Course Title	Activity Title	Activity Subtitle	PA STEELS Standards
Classroom Drone	How to Fly	Video: Classroom Drone headless mode	Video #12	
Classroom Drone	How to Fly	Video: Classroom Drone Motor Cutoff	Video #13	
Classroom Drone	How to Fly	Video: Classroom Drone Troubleshoot Multi Bind	Video #14	3.5.3-5.BB 3.5.6-8.J 3.5.9-12.MM 3.5.9-12.O
Classroom Drone	How to Fly	Video: Classroom Drone 3D Stunt Mode	Video #15	
Classroom Drone	How to Fly	Video: Classroom Drone Inflating the Gates	Video #16	
Classroom Drone	How to Fly	Video: Classroom Drone Sensor Mode	Video #17	
Classroom Drone	How to Fly	Video: Classroom Drone Sensor Cal	Video #18	
Classroom Drone	Classroom Flight Challenges	1. Altitude Control		3.5.3-5.C
Classroom Drone	Classroom Flight Challenges	2. Roll Control		3.5.3-5.C
Classroom Drone	Classroom Flight Challenges	3. Pitch Control		3.5.3-5.C
Classroom Drone	Classroom Flight Challenges	4. Yaw Control		3.5.3-5.C
Classroom Drone	Classroom Flight Challenges	5. Stunt Control		3.5.3-5.C
Classroom Drone	Classroom Flight Challenges	6. Gesture Control		3.5.3-5.C
Classroom Drone	Space Force Challenges	7. Guardian Wingman		3.5.3-5.C
Classroom Drone	Space Force Challenges	8. Orbital Flight		3.5.3-5.C
Classroom Drone	Space Force Challenges	9. Dynamic Landing		3.5.3-5.C
Classroom Drone	Classroom Activities	Air Traffice Control Says		3.5.3-5.C
Classroom Drone	Classroom Activities	Musical Drones		3.5.3-5.C
Classroom Drone	Classroom Activities	Drone Limbo		3.5.3-5.C
Classroom Drone	Classroom Activities	Drone Relay		3.5.3-5.C
Classroom Drone	Classroom Activities	Drone Basketball		3.5.3-5.C
Classroom Drone	Classroom Activities	Drone Drifting		3.5.3-5.C
Classroom Drone	Classroom Activities	Drone Golf		3.5.3-5.C
Classroom Drone	Classroom Activities	Drone Fishing		3.5.3-5.C
Classroom Drone	Classroom Activities	Drone Tennis		3.5.3-5.C