

**Physics First
Power Standards**

Uniform Motion	
PFUM1	Analyze the motion of an object in uniform motion according to its position, time and velocity. DOK4
PFUM2	Describe an object in uniform motion using multiple representations (i.e., motion diagrams, descriptions, graphs, pictures, and/or mathematical models, etc.) DOK3
PFUM3	Construct and interpret x vs. t graph of an object in uniform motion. DOK 4
Accelerated Motion	
PFAM2	Analyze and describe an object in accelerated motion using multiple representations (i.e., motion diagrams, descriptions, graphs, pictures, and/or mathematical models, etc.). DOK 4
PFAM3	Interpret v vs. t graphs for an object in accelerated motion. DOK 3
PFAM4	Construct and interpret an x vs. t graph for an object in accelerated motion. DOK 4
Forces/Newton's Laws	
PFF1	Define and identify different kinds of forces. Normal (Support), Friction, Air Resistance, Gravitational, Push/Pull, Elastic, Compression, Tension, Buoyant, Electromagnetic. DOK 2
PFF2	Describe the forces acting on an object using a force diagram. DOK 2
PFF3	Determine the motion of an object based on the net force (size and direction) acting on it. DOK 3
PFF4	Predict the outcome of an event using Newton's Laws of Motion. DOK 3
PFF5	Given a situation, explain that objects accelerate due to gravity at a constant rate regardless of mass. DOK 2
Electricity	
PFE1	Diagram and/or identify and describe the components of a complete series circuit. DOK 2
PFE2	Analyze and describe the relationship between voltage, current and resistance in a series circuit. DOK 4

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