

Flight-Testing Newton's Laws			
2009 Science			
Essential Knowledge and Skills			
Texas Science			
Grades 9-10 (Integrated Physics and Chemistry)			
Activity/Lesson	State	Standards	
Session-10 (1-5)	TX	SCI.9-10.4.A	describe and calculate an object's motion in terms of position, displacement, speed, and acceleration;
Session-10 (1-5)	TX	SCI.9-10.4.C	investigate how an object's motion changes only when a net force is applied, including activities and equipment such as toy cars, vehicle restraints, sports activities, and classroom objects;
Session-10 (1-5)	TX	SCI.9-10.4.D	assess the relationship between force, mass, and acceleration, noting the relationship is independent of the nature of the force, using equipment such as dynamic carts, moving toys, vehicles, and falling objects;
Session-1 (1-17)	TX	SCI.9-10.4.A	describe and calculate an object's motion in terms of position, displacement, speed, and acceleration;
Session-1 (1-17)	TX	SCI.9-10.4.C	investigate how an object's motion changes only when a net force is applied, including activities and equipment such as toy cars, vehicle restraints, sports activities, and classroom objects;
Session-1 (1-17)	TX	SCI.9-10.4.F	describe the gravitational attraction between objects of different masses at different distances, including satellites;
Session-2 (1-10)	TX	SCI.9-10.4.C	investigate how an object's motion changes only when a net force is applied, including activities and equipment such as toy cars, vehicle restraints, sports activities, and classroom objects;
Session-2 (1-10)	TX	SCI.9-10.4.F	describe the gravitational attraction between objects of different masses at different distances, including satellites;
Session-6 (1-8)	TX	SCI.9-10.4.A	describe and calculate an object's motion in terms of position, displacement, speed, and acceleration;
Session-7 (1-5)	TX	SCI.9-10.4.C	investigate how an object's motion changes only when a net force is applied, including activities and equipment such as toy cars, vehicle restraints, sports activities, and classroom objects;
Session-8 (1-9)	TX	SCI.9-10.4.A	describe and calculate an object's motion in terms of position, displacement, speed, and acceleration;
Session-9 (1-7)	TX	SCI.9-10.4.A	describe and calculate an object's motion in terms of position, displacement, speed, and acceleration;

Flight-Testing Newton's Laws			
2009 Science			
Essential Knowledge and Skills			
Texas Science			
Grades 9-12 (Physics)			
Activity/Lesson	State	Standards	
Session-10 (1-5)	TX	SCI.9-12.4.C	analyze and describe accelerated motion in two dimensions using equations, including projectile and circular examples;
Session-10 (1-5)	TX	SCI.9-12.4.D	calculate the effect of forces on objects, including the law of inertia, the relationship between force and acceleration, and the nature of force pairs between objects;
Session-1 (1-17)	TX	SCI.9-12.4.C	analyze and describe accelerated motion in two dimensions using equations, including projectile and circular examples;
Session-1 (1-17)	TX	SCI.9-12.4.D	calculate the effect of forces on objects, including the law of inertia, the relationship between force and acceleration, and the nature of force pairs between objects;
Session-1 (1-17)	TX	SCI.9-12.5.B	describe and calculate how the magnitude of the gravitational force between two objects depends on their masses and the distance between their centers;
Session-2 (1-10)	TX	SCI.9-12.4.C	analyze and describe accelerated motion in two dimensions using equations, including projectile and circular examples;
Session-2 (1-10)	TX	SCI.9-12.4.D	calculate the effect of forces on objects, including the law of inertia, the relationship between force and acceleration, and the nature of force pairs between objects;
Session-2 (1-10)	TX	SCI.9-12.5.B	describe and calculate how the magnitude of the gravitational force between two objects depends on their masses and the distance between their centers;
Session-3 (1-6)	TX	SCI.9-12.4.C	analyze and describe accelerated motion in two dimensions using equations, including projectile and circular examples;
Session-3 (1-6)	TX	SCI.9-12.4.D	calculate the effect of forces on objects, including the law of inertia, the relationship between force and acceleration, and the nature of force pairs between objects;
Session-5 (1-6)	TX	SCI.9-12.4.C	analyze and describe accelerated motion in two dimensions using equations, including projectile and circular examples;
Session-5 (1-6)	TX	SCI.9-12.4.D	calculate the effect of forces on objects, including the law of inertia, the relationship between force and acceleration, and the nature of force pairs between objects;
Session-6 (1-8)	TX	SCI.9-12.4.C	analyze and describe accelerated motion in two dimensions using equations, including projectile and circular examples;

Session-6 (1-8)	TX	SCI.9-12.4.D	calculate the effect of forces on objects, including the law of inertia, the relationship between force and acceleration, and the nature of force pairs between objects;
Session-7 (1-5)	TX	SCI.9-12.4.C	analyze and describe accelerated motion in two dimensions using equations, including projectile and circular examples;
Session-7 (1-5)	TX	SCI.9-12.4.D	calculate the effect of forces on objects, including the law of inertia, the relationship between force and acceleration, and the nature of force pairs between objects;
Session-8 (1-9)	TX	SCI.9-12.4.D	calculate the effect of forces on objects, including the law of inertia, the relationship between force and acceleration, and the nature of force pairs between objects;
Session-9 (1-7)	TX	SCI.9-12.4.D	calculate the effect of forces on objects, including the law of inertia, the relationship between force and acceleration, and the nature of force pairs between objects;