

Contents of Newton's Laws Folder

There are 20 folders inside of the Newton's Laws folder. Each folder contains a PowerPoint slide deck. The slide deck can be used as a PowerPoint or be imported into Google Slides. The folder also contains a PDF and Microsoft Word version of the Lesson Notes. Finally, there is an **Images** folder inside each of the folders. The images folder contains animations (usually .gif or .mp4), movies (usually .mp4), and graphics (usually .png) used in the slide deck. Often times there is a Microsoft Word document that contains the source of one or more line graphics. The availability of the MS Word document will allow teachers to manipulate any of the graphics as desired. All the images included in the PowerPoint slide deck are not necessarily saved in the Images folder. They can be edited within PowerPoint or Google Slides (if needed).

	PowerPoint Topic	File Name
1.	What is a Force?	WhatIsAForce
2.	Force Diagrams	ForceDiagrams
3.	What do Forces Do?	WhatDoForcesDo
4.	Newton's First Law	Newtons1stLaw
5.	Force-Motion Misconceptions	Misconceptions
6.	Inertia and Mass	InertiaMass
7.	Recognizing Types of Forces	ForceTypes
8.	Drawing Free-Body Diagrams	DrawingFBDs
9.	Mass vs. Weight	MassWeight
10.	Friction	Friction
11.	Newton's Second Law of Motion	Newtons2ndLaw
12.	Proportional Reasoning with Newton's Second Law	ThinkingProportionally
13.	Determining Acceleration from Force Information	DeterminingAcceln
14.	Determining an Individual Force Value	DeterminingForce
15.	Free Fall and Newton's Second Law	FreeFall
16.	Air Resistance and Terminal Velocity	TerminalVelocity
17.	Double Trouble with Two-Body Problems	TwoBodyProblems
18.	Atwood Machines	AtwoodMachines
19.	Newton's Third Law	Newtons3rdLaw
20.	Interaction Force Pairs	ForcePairs

In addition to the PowerPoints and Lesson Notes, the Newton's Laws folder contains several animations and videos (and also graphics). You will find the following animations and videos included in the Newton's Laws folder:

Folder	File Name	Format(s)	Duration
Misconceptions*	CarAnimn	.mp4, .gif	0:07
	https://youtu.be/V366mKDPxgs	YouTube	0:11
	RocketSled	.mp4, .gif	0:47
InertiaMass*	GalileoThoughtExp	.mp4, .gif	0:45

	https://youtu.be/NALJ067gj-M	YouTube	2:00
	RealBrickMovie	.mp4, .gif	0:04
	StyroBrickMovie	.mp4, .gif	0:04
	StateOfMotion	.mp4, .gif	0:45
Friction	SurfaceMorph	.mp4, .gif	0:03
	InclineAnimation	.gif	0:11
	StaticLimitAnimn	.mp4, .gif	0:14
FreeFall	FiltersDemo	.mp4, .gif	0:03
	MarkersDemo	.mp4, .gif	0:10
TerminalVelocity*	TerminalSpeed	.xlsx	Spreadsheet
	FallingBrick	.mp4, .gif	0:40
ForcePairs	BirdFlight	.mp4, .gif	1:00

* We provided a second PowerPoint designed for importing into Google Slides.