

Contents of Vectors and Projectiles Folder

There are 15 folders inside of the Vectors and Projectiles 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.	Understanding Vectors and Their Direction	VectorDirection
2.	Representing Vectors with Scaled Diagrams	ScaledDiagrams
3.	Head-to-Tail Vector Addition	HeadToTailAddition
4.	Vector Addition with Scaled Diagrams	GraphicalMethod
5.	Adding Right-Angle Vectors	AddingRtAngleVectors
6.	What is a Vector Component?	VectorComponents
7.	Resolving a Vector into its Components	VectorResolution
8.	Analytical Method of Vector Addition	ComponentAddition
9.	Relative Velocity and River Boat Problems	RelativeVelocity
10.	Motion Characteristics of Projectiles	ProjectileCharacteristics
11.	Velocity Components of a Projectile	VelocityComponents
12.	x- and y- Displacements for a Projectile	ProjectileDisplacements
13.	Mathematics of Projectile Motion	ProjectileMath
14.	Solving Horizontally-Launched Projectile Problems	HLPPProblems
15.	Solving Angle-Launched Projectile Problems	ALPPProblems

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

Folder	File Name	Format	Duration
VectorDirection*	VectorDirn	.gif	0:15
	IDVectorDirection	.mp4, .gif	0:30
ScaledDiagrams*	ScaledDiagram	.mov	1:42
	MagAndDirn	.mp4, .gif	1:06
	CCWfromEastConvention	.gif	0:16
HeadToTailAddition*	Animation1	.mp4, .gif	0:41
	Animation2	.mp4, .gif	0:42
	AnimationOrder	.mp4, .gif	0:57
GraphicalMethod	https://youtu.be/cN5nuQe8lQo	YouTube	3:36

VectorComponents	Projections	.mp4, .gif	0:30
	Riverboat	.mp4, .gif	0:08
	ComponentID	.mp4, .gif	1:02
VectorResolution*	VectorProjection	.mp4, .gif	0:34
	https://youtu.be/onCg8ckMjgU	YouTube	3:35
RelativeVelocity*	RiverB4River3	.mp4, .gif	0:07
	PlaneAndWind	.mp4, .gif	0:09
ProjectileCharacteristics*	ProjectileSimulator	.mp4, .gif	1:14
	BallDropMovie	.mp4, .gif	0:16
	TruckAndBall	.mp4, .gif	0:15
	VerticalThing	.mp4, .gif	1:06
VelocityComponents	HorizLaunchAnimation	.gif	0:08
HLPPProblems	https://youtu.be/c8gp92-Xluo	YouTube	2:15
ALPPProblems	https://youtu.be/R2zTI_XxQOA	YouTube	3:59

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