

Unit 8.1 Contact Forces Video Links

All of the videos for the OpenSciEd units can be found on the [OpenSciEd YouTube Channel](#). For classrooms that are not able to access the videos via YouTube, we have provided alternative streaming links in the document below. Please note that some of the videos are only available via YouTube for permission reasons.

Student Facing Videos

Lesson	Video Name	YouTube Link	Alternative Link	Description	Credits and Usage
Lesson 2	Golf ball colliding with CD case	https://youtu.be/ZGN7zZrt-sQ	https://www.wevideo.com/video/1847735921	This is a slow motion video of what happens to a golf ball when it collides with a CD case.	
Lesson 2	Carts with rubber stoppers about to collide	https://youtu.be/8woJSebzTio	https://www.wevideo.com/video/1847738306	This is a slow motion video of what happens when two blue carts with rubber stoppers are about to collide.	
Lesson 2	Carts with metal rings colliding	https://youtu.be/sqXNPgYEEA4	https://www.wevideo.com/video/1847740693	This is a slow motion video of what happens when two cars with metal rings collide.	
Lesson 3	Car collision showing bumpers	https://youtu.be/My1WOU3LOCM	https://www.wevideo.com/video/1847745361	Slow motion video of slow speed collision between two cars showing elastic deformation of their bumpers	

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Lesson 3	Slow motion video of golf club hitting a golf ball	https://youtu.be/sVr6tVy7htU	https://www.wevideo.com/video/1848445134	Slow motion video of golf club hitting a golf ball	
Lesson 3	Baseball and bat collision	https://youtu.be/FYbn1WSWmQg	https://www.wevideo.com/video/1849079095	Slow motion video showing collision between baseball and bat, showing the resulting deformation in both	
Lesson 3	Strength Testing of Concrete Bridge	https://youtu.be/MVkmrGJBQAo	https://www.wevideo.com/video/1849083706	This video is for students to analyze Strength Testing of Concrete Double-Tee Bridge Beam	
Lesson 5	Carts colliding with brick	https://youtu.be/HRYcfOPCoRo	https://www.wevideo.com/video/1849074640	Slow motion video of cart colliding with a brick with peak force collar	
Lesson 5	Carts with different masses Collision	https://youtu.be/qeO3FjODpik	https://www.wevideo.com/video/1849039677	Slow motion video of carts with different masses and speeds colliding, with rings as force detectors	
Lesson 7	Condition A - regular speed & mass	https://youtu.be/yglbCFuqYFo	https://www.wevideo.com/video/1849086581	Investigation 2, condition A - regular speed and mass launch pushing a box	

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Lesson 7	Condition B - regular speed & double mass	https://youtu.be/XgcZgVAiCYk	https://www.wevideo.com/video/18490889911	Investigation 2, condition B - regular speed and double the mass launch pushing a box	
Lesson 7	Condition C - double speed & regular mass	https://youtu.be/3RztOwNQATO	https://www.wevideo.com/video/1849091325	Investigation 2, condition C - double the speed and regular mass launch pushing a box	
Lesson 13	Cart & brick Collision - no rings	https://youtu.be/co5fN22N5OA	https://www.wevideo.com/video/1849095210	peak force collision with cart and brick, no rings	
Lesson 13	Cart & Brick Collision - 1 Ring on Brick	https://youtu.be/OUOLsRFmBnk	https://www.wevideo.com/video/1849096143	peak force collision with cart and brick, one ring on brick	
Lesson 13	Cart & Brick Collision - 1 Ring on Cart	https://youtu.be/3A1gKY2qK1U	https://www.wevideo.com/video/1849097831	peak force collision with cart and brick, one ring on cart	
Lesson 13	Cart & Brick Collision - 2 Rings on Brick	https://youtu.be/eqKLBIFZlnE	https://www.wevideo.com/video/1849099485	peak force collision with cart and brick, two rings on brick	
Lesson 13	Cart & Brick Collision - 2 Rings on Cart	https://youtu.be/nqaDgidCHOM	https://www.wevideo.com/video/1849100727	peak force collision with cart and brick, two rings on cart	

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Lesson 15	Cheerleading Competition Routine #1	https://www.youtube.com/watch?v=yaljRoKZVvg	No alternative link available	This video is used as part of the transfer task on Day 1. Cheerleading Competition Routine #1	2019 University of Kentucky cheerleaders - 24 time national champions
Lesson 15	Cheerleading Competition Routine #2	https://www.youtube.com/watch?v=RJYbqDFlexk	No alternative link available	This video is used as part of the transfer task on Day 1. Cheerleading Competition Routine #2	
Lesson 15	Cheerleading Competition Routine #3	https://www.youtube.com/watch?v=RgH-Esw6Gpl	No alternative link available	This video is used as part of the transfer task on Day 1. Cheerleading Competition Routine #3 - <i>this is a compilation of routines - choose 1-2 to watch.</i>	

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Teacher Preparation Videos

Lesson	Video Name	YouTube Link	Alternative Link	Description	Credits and Usage
Lesson 2	Preparing Sugar Glass	https://youtu.be/-jYT577_CAM	https://www.wevideo.com/video/1849106949	This video is a teacher reference for how to prepare sugar glass for the classroom investigation.	
Lesson 3	Setting up Laser to Test Deformation	https://youtu.be/N_LwGqvnOjk	https://www.wevideo.com/video/1849108470	video demonstration of setting up and using the laser to test deformation of materials	
Lesson 12	Setting up Investigation on the Ramp	https://youtu.be/3HZgumZXbKO	https://www.wevideo.com/video/1849110279	Setting up investigation on the ramp	