

DIGITAL LESSON



ENERGY IN COLLISION



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WHAT ARE LIGHTNING LESSONS?

Short, engaging, fully digital lessons that:

- Introduce and Build Tier 3 Academic Vocabulary
- Introduce Key concepts with engaging videos or digital lessons
- Include a Practice Activity
- Include a short quiz or assessment

DIGITAL LESSON

ENERGY IN COLLISION



KEY VOCABULARY



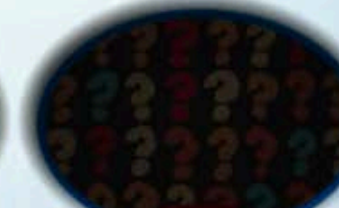
COLLISIONS VIDEO



"BOWLING 960L" READER



INTERACTIVE ACTIVITY:
COLLISION SIMULATION



QUIZ

EASY TO NAVIGATE HUB

Perfect for whole class instruction on a smart board or projector.


★ or ★

Independent student work, center, or intervention

Click on each of the vocabulary words to find out what they mean!

- Collision
- Transfer
- Impact
- Potential Energy
- Kinetic Energy
- Gravity
- Friction

Impact is the force or action of one object hitting another, which can cause changes in both objects.



INTERACTIVE VOCABULARY CARDS

- Introduce Tier 3, Academic Vocabulary
- Audio
- Interactivity



ENERGY IN COLLISIONS


Video Mini Lesson





ORIGINAL VIDEO LESSON BY MAGICORE ACADEMY



Introduces concept and key
vocabulary



 Take a look at this real life example of energy in collision and answer the questions! 



 How does the energy transfer during the crash affect the cars' structure?
type your text here

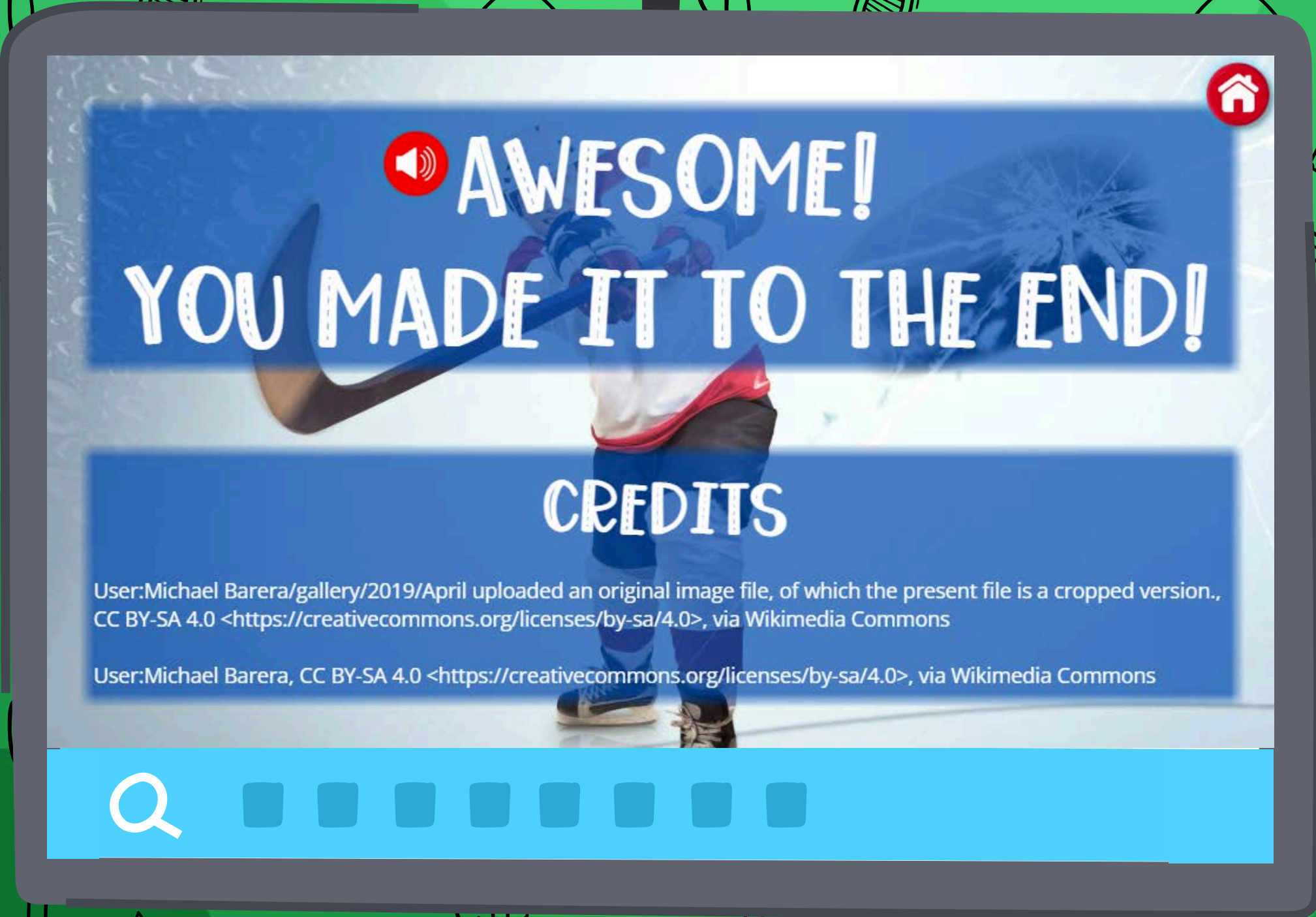
 What happens to the passengers inside the car during a collision?
type your text here

 Car Crash Safety Tests 

INTERACTIVE ACTIVITY

Short activity to practice concepts learned in video lesson



SELF ASSESS

Immediate student or class feedback on activities and multiple choice questions.



INTERACTIVE READER

- Standards Based
- Lexile Leveled
- Nonfiction
- Application of Science Skill
- Interactive
- Quiz based on reader

Question 1

Fill in the cause-and-effect chart to show how energy is transferred when playing hockey.

Cause	Effect
The hockey stick smacks into the puck.	type your answer here

SUBMIT

The interface also includes a home icon, a speaker icon, a play button, a search bar, and a progress indicator with 8 steps.

QUIZ

- Multiple choice and short response questions
- Encourages students to refer back to the video
- Multiple choice questions give immediate feedback to students

Balanced & Unbalanced Forces Answer Recording Sheet

Type your name here



- Activity 1a: The car hit the wall.
- Activity 1b: The wall pushes back against the car.
- Activity 2: Answered Correctly
- Activity 3: Scientists use crash test dummies to study unbalanced forces. They put sensors all over the dummies body to measure the forces they feel. Then, they mimic real car crashes in a lab so they can measure the forces a human would experience.
- Quiz 1: Force is a push or pull on an object.
- Quiz 2: Answered Correctly
- Quiz 3: When a car is moving down the highway.
- Quiz 4: Unbalanced forces happen when the forces are not equal.
- Quiz 5: The foot has more force than the ball and gravity.
- Quiz 6: The ball stops because the forces become balanced.
- Quiz 7: They can help us stay safe like the example with crash test dummies.



TEACHER REVIEW

Student responses are reported at the end of the lesson for students to print or teachers to review.