

# Challenge 1: Optimizing Automobiles

## Suggested Resources

### VIDEOS

Use your Internet browser to search for videos to show during class using the terms “car innovations,” “making mousetrap cars,” “physics efficiency,” or “mechanical engineer.” Conduct this search prior to class to verify the content is appropriate for the class and the challenge.

### WEBSITES

#### **CTE Online**

<https://cteonline.org/>

Suggested search keywords: mousetrap car

#### **DesignNews**

<https://designnews.com/>

Suggested search keywords: auto innovations

#### **Instructables**

<https://instructables.com/>

Suggested search keywords: mousetrap car

#### **National Highway Traffic Safety Administration**

<https://nhtsa.gov/>

#### **Texas Career Check**

<https://texascareercheck.com/>

Suggested search keywords: mechanical engineer

# Challenge 2: Living on the Edge: Man vs Fire

## Suggested Resources

### ARTICLE

NASA. (2019, September 10). *Satellite data record shows climate change's impact on fires* [Website article]. Retrieved from <https://climate.nasa.gov/news/2912/satellite-data-record-shows-climate-changes-impact-on-fires/>

### VIDEOS

Use your Internet browser to search for videos to show during class using the terms "ratios and percent" or "solving problems with percent." Conduct this search prior to class to verify the content is appropriate for the class and the challenge.

### WEBSITES

Use your Internet browser to search for resources using the terms "fire science careers."

#### **InciWeb - Incident Information System**

<https://inciweb.nwccg.gov/>

#### **Smokey Bear**

<https://smokeybear.com/en>

#### **Texas A&M Forest Service**

<https://tfsweb.tamu.edu/default.aspx>

#### **Texas Career Check**

<https://texascareercheck.com/>

Suggested search keyword: fire

#### **U.S. Forest Service**

<https://fs.usda.gov/>