# **8TH GRADE** SCIENCE

How can we use science and engineering practices to explore motion, waves, evolution, and natural selection?

## **THE 5 CHALLENGES**

### **Unit 0: Groupwork**

#### How do we work productively in groups?

Groupwork is an instructional strategy that helps promote equitable classrooms, provide opportunities for student interactions, and increase science discussions to improve student learning.

## Unit 1: Motion in the Universe

#### How can we change the motion of an asteroid heading toward earth?

In this unit, students consider how all the objects in the solar system move. They also consider how scientists could prevent an asteroid or another near-Earth object from colliding with Earth.

## Unit 2: Waves

#### How can we use waves to communicate?

In this unit, students investigate how waves represent repeating patterns of information that can be carried from one location to another.



## Unit 3: Life on Earth

### What evidence supports the claim that Earth is heading for a sixth mass extinction?

In the unit, students work together to create a presentation explaining the evidence that supports the claim that Earth is heading for a sixth mass extinction and why people should care about the threat of a potential mass extinction.

#### **Unit 4: Natural Selection**

#### How can we reduce the spread of antibiotic resistance?

In this unit, students study natural selection to determine how antibiotic resistance happens and how to reduce the spread of antibiotic resistant bacteria.





