

# THERMAL ENERGY

**Mar. 28, 2019**

NEXT GENERATION SCIENCE STANDARDS

**Day 3/131**



## **At the end of today's lesson you will;**

- *Why do things change temperature? What is happening when the air in the school gets warmer?*

## **Classwork-**

- **Thermal Energy 2.2 and 2.3**
- *Students continue to investigate why molecules change speed by reading “How Air Conditioners Make Cities Hotter,” an engaging text that builds on students’ emerging knowledge of kinetic energy to explain how air conditioners can actually make cities hotter during the summertime. The article provides an initial opportunity for students to consider how changes in the kinetic energy of molecules actually happen in the context of real-world phenomena.*
- *Next, students gather evidence from the Sim and the article “How Air Conditioners Make Cities Hotter” in order to choose between two claims about why molecules change speed. Using the Sim, students observe that when two things at different temperatures are placed in contact, kinetic energy transfers from the faster molecules of the hotter thing to the slower molecules of the colder thing, which results in a corresponding change in the molecules’ speed. This happens through a series of collisions between the faster molecules and the slower molecules, which moves energy from one part of the system to the other. Students then reread a passage from “How Air Conditioners Make Cities Hotter” that reinforces the fact that energy is neither created nor destroyed.*

## **Homework-**

- *Complete all of the activities from today's Thermal Energy 2.2 and 2.3 lessons.*
- *Continue to review the vocabulary terms found in the Thermal Energy unit on QUIZLET.*
- *Vocabulary Quiz Next Tuesday.*