

## Newton Time

**Honoree:** Lorenzo Levon Kirkland

**Grade Level:** 6-8

**Subject:** Science

**Standard/Indicator:**

**6-5** The student will demonstrate an understanding of the law of conservation of energy and the properties of energy and work

**Goal/Objective(s)**

- Identify the sources and properties of heat, solar, chemical, mechanical, and electrical energy
- Explain how energy can be transformed from one form to another (including the two types of mechanical energy, potential and kinetic, as well as chemical and electrical energy) in accordance with the law of conservation of energy
- Identify how the honoree, Lorenzo Kirkland, went through multiple energy transformations on a weekly basis

**Items/Materials Needed**

- United Streaming Video “Energy and Energy Transformations: Wile E. Coyote and Roadrunner”
- 2013 AT&T African American Calendar Bio on Lorenzo Kirkland
- Football
- Open Space
- Not Cam, but Isaac Newton Handout
- Youtube video: Cam Newton 2010-11 Highlights-All the Above

**Steps/Strategies**

1. The teacher will show a brief video on energy transformations
2. Teacher will review the 6 main types of energy as well as energy transformations through an interactive lesson
3. Teacher will then introduce the honoree (Lorenzo Levon Kirkland) to the students with the use of the AT&T SC African American History Calendar.
4. Teacher will guide students through, “It’s Newton Time” (see handout).

**Printable Worksheet:** “It’s Newton Time” (attached)

# It's Newton Time!



## Part One:

Students will be grouped into 2-3 member teams. Your task is to view the Cam Newton highlight film and write down at least five energy transformations you see occurring. Two of these transformations have to be something different than kinetic to potential or potential to kinetic. Think outside the box. Explain each example of a transformation that you see. Record the information below.

1. **Energy Transformation:** \_\_\_\_\_ to \_\_\_\_\_

Example from video \_\_\_\_\_

\_\_\_\_\_

2. **Energy Transformation:** \_\_\_\_\_ to \_\_\_\_\_

Energy from video \_\_\_\_\_

\_\_\_\_\_

3. **Energy Transformation:** \_\_\_\_\_ to \_\_\_\_\_

Example from video \_\_\_\_\_

\_\_\_\_\_

4. **Energy Transformation:** \_\_\_\_\_ to \_\_\_\_\_

Example from video: \_\_\_\_\_

\_\_\_\_\_

5. **Energy Transformation:** \_\_\_\_\_ to \_\_\_\_\_

