



## GRADE 7 LIFE SCIENCE

# Food as Energy

Total Unit Running Time: 30-40\* minutes

NGSS Addressed: MS-LS1-6, MS-LS1-7, MS-LS2-2, MS-LS2-3

### FIELD TRIP: **1031 Fitness, IA**



Running Time: 9:46

NGSS: MS-LS1-7

VictoryVR Host, Steve Grubbs goes into the bowels of a gym to perform an experiment on two athletes. The point is to demonstrate the effects of food on the human body, in particular, muscle-building. Comparing two similar athletes and workouts, along with the food variables (chocolate milk vs. sports drink) these athletes are put to the test! Tune in to see how these common beverages affect our bodies when used as an energy source.

### INTERACTIVE EXPERIENCE: **Boulder Roll**



Running Time: Self-paced\*

Learners stand atop a snowy peak on the VictoryVR Mountain as ogres charge up toward them. By rolling boulders down the hill, the ogres are vanquished, allowing students to earn more time to make it to the finish. Rolling boulders is easy, but to get enough of them to conquer the ogres, students must correctly respond to rapid-fire questions based on the unit.

### THEATER 1: **Cellular Respiration**



Running Time: 6:51

NGSS: MS-LS3-1, MS-LS4-5

#### Topics Covered

- Cellular respiration process
- Mitochondria, ATP, pyruvate, glycolysis, and Krebs cycle detailed

#### Assessment Answer Key & Critical Thinking Skills

1. A (BT1--knowledge)
2. B (BT2--comprehension)
3. C (BT1--knowledge)
4. A (BT2--comprehension)
5. D (BT3--application)

### THEATER 2: **Human Digestion**



Running Time: 6:12

NGSS: MS-LS1-7

#### Topics Covered

- Digestive stages and process
- How food becomes useful to the body

#### Assessment Answer Key & Critical Thinking Skills

1. C (BT1--knowledge)
2. D (BT2--comprehension)
3. D (BT1--knowledge)
4. B (BT2--comprehension)
5. D (BT6--evaluation)

### TEACHER DEMO: **Feasting with Wendy**



Running Time: 4:30

NGSS: MS-LS1-6, MS-LS2-2, MS-LS2-3

#### Topics Covered

- Food web relationships; energy transfer
- Hunting behavior of apex predators (lions)
- Giraffe physical characteristics and diet

#### Assessment Answer Key & Critical Thinking Skills

1. A (BT1--knowledge)
2. D (BT2--comprehension)
3. C (BT2--comprehension)
4. B (BT3--application)
5. A (BT6--evaluation)