



## SAMPLE LESSON PLANS

### Health Smart Virginia - Sample Lesson Plan

Grade 4th

Unit General Nutrition

#### SOLs:

- Explain the role of moderate to vigorous physical activity (MVPA) for energy balance.

**Title:** Calorie Burner

#### Objectives/ Goals:

[Students are learning about energy balance and how the body uses energy]

- Students will learn that their bodies are using energy all the time, even while sleeping.
- The more vigorous their activity level becomes, the more calories they will burn
- To achieve energy balance, students should strive for 60 minutes per day of moderate/vigorous physical activity along with a healthy, balanced diet.
- This lesson design highlights the importance of physical activity in a healthy lifestyle, while also correcting the occasional student misconception that they must burn every calorie they consume through exercise.

#### Materials:

[Equipment and Set Up]

- Food cards spread out in a corner of the gym
- Station cards (attached below) placed at each corresponding station
- Sleep Station- Use a large mat (or multiple mats) for students to lay on
- Stairs- Use step boxes
- Laps around gym- no equipment needed

Lesson Created by Tommy Landseadel and Luke Noble

- Jump station- no equipment needed
- Cleaning Station- use any small equipment items in large number. Students dump out, then clean up.
- Couch station- Mats arranged for students to sit on like a couch
- Curl Up Station- curl up mats
- Upper Body Station- Pull up bar and peg board if available
- Dancing- No equipment needed

## **Procedure:**

### **Intro-** Discussion should cover:

- Review the concept of energy balance and how energy in and energy out are measured (calories)
- Students' bodies are using energy all the time, even while sleeping. The more vigorous their activity level becomes, the more calories they will burn.
- To achieve energy balance, students should strive for 60 minutes per day of moderate/vigorous physical activity along with a healthy, balanced diet. Students also need to make sure they are consuming enough calories to support their activity level.
- Children are growing. Weight gain is a natural and healthy part of human growth. It is very important for children not to worry too much about their weight, but instead to focus on healthy choices with eating habits and physical activity.

### **Description-**

The station cards approximate how many calories the average child would burn doing the activity, and give a PE simulated version (1 minute or less so students can accomplish more). Make sure your students read the cards closely so they don't think sleeping burns calories more efficiently than running.

Students rotate through stations as they choose with the teacher calling out time every minute. Teachers can either allow students to rotate to different stations as they choose, or structure the activity to make sure everyone does each station. If allowing choice, students can only do the sleep station 1 time. Teachers may want to limit the couch station too. Students are trying to burn as many calories as they can. Each time they complete an activity, they collect food cards with calorie totals (approximately) equaling the calories they have just burned.

### **Closure-**

- Are we burning calories all the time?
- Which activity that you did burned calories at the fastest rate? (peg board/pull ups)
- Which activity burned calories at the slowest rate? (sleep)
- Raise your hand if you were able to attain energy balance with the food cards you collected

Lesson Created by Tommy Landseadel and Luke Noble

## **Assessments, References & Sources:**

### **Resources:**

- <https://www.precisionnutrition.com/all-about-energy-balance>

### **Assessments:**

There is an exit slip attached after the station cards

# Sleep Station

- You burn about 300 calories overnight if you sleep 9-10 hours.
- 1 minute sleeping = 300 calories
- You may only do this station 1 time

# Stairs

- You burn about 150 calories walking up and down stairs for 20 minutes. 250 calories running stairs for 20 minutes.
- 1 minute walking speed = 150 calories
- 1 minute running speed = 250 calories

# Laps around the Gym

- You about burn about 50 calories per mile at walking speed. 100 calories per mile running.
- 5 laps walking = 50 calories
- 5 laps running = 100 calories

# Jump Station

- 8 jumping jacks burns about 1 calorie
- 1 minute of moderate pace jumping activity = 100 calories
- 1 minute high intensity jumping = 150 calories

# Cleaning

- You burn about 100 calories per hour of cleaning and tidying around the house
- 1 minute of cleaning = 100 calories

# Chilling on the Couch

- You burn about 50 calories an hour if you are sitting still with minimal movement. You burn about 100 calories per hour if you are fidgeting and moving around.
- 1 minute of sitting still = 50 calories
- 1 minute of active sitting = 100 calories

# Core Station

- You burn about 25 calories if you do curl ups for 5 minutes. That is a rate of 300 per hour
- 1 minute of curl ups = 150 calories
- 1 minute of plank or boat = 100 calories

# Upper Body Station

- You burn about 40 calories if you do high intensity push-ups for 5 minutes. That is a rate of 480 per hour
- 1 minute push-ups = 250 calories
- 1 minute pull-ups/peg board = 300 calories
- 1 minute flexed arm hang = 200 calories

# Dancing

- You burn about 100 calories on 30 minutes dancing at a moderate pace, 150 calories at a vigorous pace
- 1 minute of dancing = 150 calories

Today in class, we learned about energy balance. Please answer the following questions.

- 1) True or False: Our bodies are burning calories all the time, even while we are sleeping
  
- 2) Which types of activity burn calories at the fastest rate?
  - A) Sedentary activities like sitting on a couch
  - B) Moderate activities like walking at a brisk pace
  - C) Vigorous activities like running or push ups
  
- 3) How much moderate/vigorous physical activity should I try to get each day?
  - A) I'm good, I don't need any
  - B) 30 minutes
  - C) 60 minutes
  - D) 9-10 Hours