



## SAMPLE LESSON PLANS

### Health Smart Virginia - Sample Lesson Plan

#### Grade Level 4

**Unit**      **Macronutrients and Energy Balance**

**SOLs:**

- 4.5 The student will explain the nutrition and activity components of energy balance.

**Title:**      **Energy Tag**

**Objectives/ Goals:**

- Identify the number of calories per gram of fat (9), protein (4), and carbohydrates (4)
- Explain the uses of salt and sugar and the harm of excessive salt and sugar intake
- Describe how the body uses each macronutrient (fat, protein, carbohydrates)
- Calculate the calories per gram of macronutrients for a variety of foods
- Explain the importance of hydration
- Compare different hydration choices
- Explain the role of Moderate to Vigorous Physical Activity (MVPA) for energy balance

**Materials:**

- 6 gator balls (2 red, 2 yellow, 2 blue)
- 3 large cones with visual signs listing protein (4 push-ups), carbohydrate (4 rocket launchers), and fat (9 jumping jacks)
- iPad for music

## Procedure:

- Introduction: Ask students to name a nutrient that supplies energy (protein, carbohydrate, fat). What types of foods fit in these categories? Introduce the term macronutrient and calorie.
- Warm-Up: Students will jog while music is playing in a designated direction on the track. Students will move to designated exercise spots to perform a routine of stretches and exercises. (15-20 Curl ups, pike stretch, butterfly etc.), teacher will lead exercises and use iPad for cadence curl ups.
- Three taggers are chosen per class and given a colored gator ball. Red-Carbohydrate, Yellow-protein, Blue-fat
- When the music starts (iPad), the taggers (macronutrients) will try to tag other students by touching them with the ball on the torso. If a student is tagged, they will go to the designated corner based on the color of the ball. Red-4 rocket launchers, Blue-9 jumping jacks, yellow-perform 4 push-ups. Teacher will place cones in corner and monitor the activity for safety. In the first round, students will power walk. If safe choices are demonstrated, change the locomotor skill during each round. Each round is 2-3 minutes.
- Each round, new taggers are chosen. Concepts are introduced between each round from the following:
- Carbohydrates: quick fuel, burns quickly, offers 4 calories per gram, and contained in fruits, veg, and pasta
- Protein: helps build and repair muscles and tissues, offers 4 calories per gram, and contained in meats, dairy, fish, yogurt
- Fats: slow fuel, insulate organs, offers 9 calories and contained in butter, cheese and olive oil
- Closure and assessment: Students will be given an exit ticket by pencil/paper, or Plickers
- Teacher will monitor handing out of materials and collection
- Ask students to think about their food choices while in school and at home. Junk food does not give you sustained energy and will make you crash

## Assessments, References & Sources:

- Focused Fitness Five for Life Basic Curriculum
- Demonstration on a version of this game by Jason Kain at Columbia Elementary in Annandale, Virginia (Fairfax County)
- [http://www.doe.virginia.gov/testing/sol/standards\\_docs/physical\\_education/index.shtm](http://www.doe.virginia.gov/testing/sol/standards_docs/physical_education/index.shtm)
- Presentation at APE CTA at James Madison University by Sheila Jones, titled "Nutrition and Health Concepts in Adapted PE"