

The **OPEN** Academic Language Project

Based on the Virginia Physical Education Standards of Learning

Academic Language Card Set

GRADE EIGHT

Energy Balance



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AEROBIC ENERGY SYSTEM

(Noun)

The body produces the most energy with this system, but at a low intensity. Aerobic exercise (noun) works the heart and lungs to help the body use oxygen better.

Running, swimming, and biking are forms of aerobic exercise.

(VA SOL 8.5)

ANAEROBIC ENERGY SYSTEM

(Noun)

The energy system used when the body produces energy without oxygen. Anaerobic exercise (noun) is short duration (less than two minutes), high intensity exercise that does not use oxygen for energy.

Strength-based exercises such as sprinting are anaerobic activities.

(VA SOL 8.5)

BODY COMPOSITION

(Noun)

The ratio of lean tissue to fat tissue in the body.

Max planned to improve his body composition by exercising regularly and eating nutritious foods.

(VA SOL 8.5)

CALORIC INTAKE

(Noun)

The number of calories that a person consumes daily.

Aisha wanted to gain weight, so she made sure her caloric intake was more than her caloric expenditure.

(VA SOL 8.5)

ENERGY BALANCE

(Noun)

The balance between calories taken in from food compared to calories burned through physical activity. The balance is positive (weight gain) when the body stores extra food as fats and negative (weight loss) when the body uses stored fat to provide energy for movement.

Mandy wanted to assess her energy balance, so she started measuring her caloric intake and expenditure.

(VA SOL 8.5)

ENERGY EXPENDITURE

(Noun)

The number of calories a person needs to be physically active.

Sandy wanted to calculate her energy expenditure so she bought a device she could wear to calculate calories burned.

(VA SOL 8.5)

HYDRATION

(Noun)

A supply of water to the body to restore or maintain a balance of fluids.

Bruce drinks water before, during, and after events in order to maintain his hydration. By staying hydrated, he is able to perform his best.
(VA SOL 8.5)

MACRONUTRIENTS

(Noun)

Nutrients required in large amounts for proper body functioning, including protein, fat, and carbohydrates.

Lucas identified fats, proteins, and carbohydrates as the macronutrients used in the human body.

(VA SOL 8.5)

MINERALS

(Noun)

Substances in food, like iron, calcium, and potassium, that help the body grow and stay healthy.

Mr. Rossi taught his class the importance of getting an appropriate amount of minerals such as salt in your diet.

(VA SOL 8.5)

NUTRIENTS

(Noun)

Substances in food that provide nourishment essential for growth and development.

Blair consumes a variety of nutrients in order to stay healthy.
(VA SOL 8.5)

PHYSICAL ACTIVITY

(Noun)

Any physical movement
that uses the body's energy.

Taking a walk with my family is a great
physical activity and helps us stay healthy.
(VA SOL 8.5)

PORTION SIZE

(Noun)

The amount of food a person decides to eat at one time.

Kevin wanted to gain weight, so he ate larger portion sizes of healthy foods.

(VA SOL 8.5)

RATE OF PERCEIVED EXERTION (RPE)

(Noun)

A way of measuring physical activity intensity level by how hard you feel your body is working.

Nathan used the RPE scale to identify how hard he was working during the basketball activity.

(VA SOL 8.5)

SALT

(Noun)

A mineral that helps maintain blood pressure, manages the amount of water in the cells, and keep nerves operating.

The teacher said we should avoid foods that are too high in salt because it can increase our blood pressure.

(VA SOL 8.5)

SUGAR

(Noun)

A carbohydrate that is found naturally in fruits, vegetables, and milk products. It is also added to many foods during processing.

The students were asked to create a daily meal plan that was low in sugar.

(VA SOL 8.5)

VITAMINS

(Noun)

Substances that are essential for normal growth and nutrition.

Orange juice contains Vitamin C.
(VA SOL 8.5)

WARM-UP

(Noun)

A brief 5 to 15-minute period of exercise that precedes the workout. The purpose of the warm-up is to elevate muscle temperature and increase blood flow to the muscles that will be engaged in the workout, exercise, or competition.

Christa always performed a warm-up before dance practices and performances in order to prevent muscle injury.

(VA SOL 8.5)