

# The **OPEN** Academic Language Project

Based on the Virginia Physical Education Standards of Learning

Academic Language Card Set

# GRADE EIGHT

## Anatomical Basis of Movement



More Physical Education Curriculum Tools at [www.OPENPhysEd.org](http://www.OPENPhysEd.org)  
OPEN is a Public Service of US Games

# AGILITY

(Noun)

A skill-related fitness component that is the ability to quickly change body position.

Robert could quickly move across the court to return Annalise's serve because of his agility.

(VA SOL 8.2)

# BALL AND SOCKET JOINT

(Noun)

A joint with a ball-shaped end fitting into a cup-shaped end of another bone.

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A ball and socket joint, like the hip or shoulder, allows for a wide range of movement.

(VA SOL 8.2)

# BIOMECHANICAL PRINCIPLES

(Noun)

Fundamentals of the study of movement within the human body.

Trey focused on the biomechanical principle of base of support when he was trying a headstand.

(VA SOL 8.2)

# BODY SYSTEMS

(Noun)

A group of body organs that together perform vital functions.

Examples are cardiorespiratory, vascular, muscular, and skeletal.

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Zack was learning about major body systems and became particularly fascinated by the muscular system.

(VA SOL 8.2)

# COORDINATION

(Noun)

A skill-related fitness component that is the ability to combine movements of several parts of the body.

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Jumping rope requires a lot of coordination because it involves turning the rope and jumping at the same time.

(VA SOL 8.2)

# DEFENSE

(Noun)

The team or players in a game or sport who are trying to steal away possession of the ball/object and stop the opponent from scoring a goal or point.

Ali's team was good at playing defense because they kept the other team from scoring.

(VA SOL 8.2)

# ENERGY

(Noun)

The biomechanical principle of energy in motion or force that maximizes the efficiency of movement.

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During the approach in a volleyball spike, the momentum of the body builds up energy.

(VA SOL 8.2)

# EXTENSION

(Noun)

The action of moving a limb from a bent to a straight position.

Rhianna performed a leg extension during her balance beam routine.

(VA SOL 8.2)

# FEEDBACK

(Noun)

Information provided in reaction to a performance or action.

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Anthony gave corrective feedback to his partner by telling him how he could improve his serve.  
(VA SOL 8.2)

# FLEXION

(Noun)

The action of moving a limb from a straight to a bent position.

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As Colin was doing a squat, he experienced flexion of his knees.

(VA SOL 8.2)

# FORCE

(Noun)

Strength or power.

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Isaac couldn't catch the ball because William used too much force when he threw it.

(VA SOL 8.2)

# HINGE JOINT

(Noun)

A joint between bones that allows movement in only one plane.

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Because the elbow can only move along one straight line when it bends and straightens, it is a hinge joint.

(VA SOL 8.2)

# JOINT

(Noun)

A structure in the body where two parts of the skeleton fit together.

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The arm and the hand are connected by the wrist joint.  
(VA SOL 8.2)

# MOVEMENT CONCEPTS

(Noun)

The elements important in the study of human movement: body awareness, space, and qualities of movement (force, balance, time, and flow).

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At the end of the school year, Lucas was able to recall a number of movement concepts he learned in physical education.  
(VA SOL 8.2)

# MUSCLE

(Noun)

Body tissue that can change its size to move body parts.

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Building muscle in our bodies helps us to do everyday things like lifting heavy objects.

(VA SOL 8.2)

# MUSCLE CONTRACTION

(Noun)

The tensing of muscle fibers  
in response to load or force.

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Muscle contraction is what allowed  
Cassidy to lift the weights.  
(VA SOL 8.2)

# NEWTON'S LAWS OF MOTION

(Noun)

A set of 3 physical laws that lay the foundation for scientific mechanics. 1) The Law of Inertia;  
2) The Law of Acceleration;  
3) The Law of Action and Re-action.

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Daniel connected his circus arts skills to science class by reading about Newton's Laws of Motion.

(VA SOL 8.2)

# OFFENSE

(Noun)

The team or players in a game or sport who are attempting to score or move the ball forward.

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The offense was able to pass the ball and score against the other team's defense.

*(VA SOL 8.2)*

# PEER ASSESSMENT

(Noun)

An evaluation of a student's performance or skill in relation to that is completed by a peer.

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Mrs. Tully asked her students to find a partner and do a peer assessment of the basketball dribble.

(VA SOL 8.2)

# PIVOT JOINT

(Noun)

A joint in which movement is restricted to rotation.

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Judy identified inward rotation of the forearm as a pivot joint.

(VA SOL 8.2)

# POWER

(Noun)

A skill-related fitness component that is a combination of strength and speed.

Michaela knew that she must have power in her legs to do a long jump.

(VA SOL 8.2)

# REACTION TIME

(Noun)

A skill-related fitness component that is the time it takes a person to respond to what they can hear, see, or feel.

Hitting a fast pitch requires good reaction time to swing the bat quickly.

(VA SOL 8.2)

# ROTATION

(Noun)

The action of turning around  
an axis or center.

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Erika, a dominant softball pitcher, used her  
arm's full rotation to perform a windmill pitch.  
(VA SOL 8.2)

# SPEED

(Noun)

A skill-related fitness component that is the ability to move the body rapidly from one point to another.

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Ralph's speed was incredible. Sara was the only student in the entire school that could keep up with him.

(VA SOL 8.2)

# STRATEGY

(Noun)

A plan of action for achieving a goal.

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The team scored many points because their offensive strategy was working well.

(VA SOL 8.2)

# TACTIC

(Noun)

An action or strategy that helps  
in achieving a specific goal.

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You need both offensive and defensive  
tactics to win a game.  
(VA SOL 8.2)