

POWER STANDARD 1: I Can Move Correctly

METACOGNITION

Name: Answer Key

Please answer the following questions in your own words.

1. Why is it important to know the biomechanical principles?

You can detect and correct your own and others' errors, increase success, increase accuracy, increase possession and scoring, and do the skill accurately and safely. Also, often principles transfer from skill to skill and sport to sport.

2. How can knowing these principles help you in other activities?

These principles transfer from skill to skill and make it easier to identify what you are talking about. If we have been taught these principles and you say, "Hey, please connect your dots," we know what we can immediately do to fix it or what we should focus on.

3. How can knowing these principles help correct errors you might make?

If I am not producing enough power, I can focus on stepping power and twisting power. If I am hitting the tennis ball over and out of the court, I may need to think about what my follow-through looks like.

4. List three fitness benefits and two biomechanical principles with an example of each for tennis.

Fitness benefit	Fitness benefit	Fitness benefit	Biomechanical principle with example	Biomechanical principle with example
Muscular endurance (from repeating skills)	Cardiorespiratory endurance (if you can maintain your target heart rate)	Agility—moving quickly on the court	Follow through on forehand—having your swinging arm end with the racket and arm over your opposite shoulder	Tracking—aligning your body to the side of the ball, contacting the sweet spot on the racket, playing the ball to the back corners, keeping your eye on the ball

From G. Bert and L. Summers, 2013, *Meeting physical education standards through meaningful assessment* (Champaign, IL: Human Kinetics).