

Assessment Questions

Module 1.0: Basketball Matters

1. True or False: All solids behave the same way.
2. Which of the following evidence best supports how you know there is matter inside the ball?
 - a. The ball gets heavier when you put more air in it.
 - b. When the ball is full it bounces differently.
 - c. When the ball is empty it has a different shape.
 - d. The ball is different from other balls.

Module 2.0: Shot Tracking with and without Technology

1. Which of the following mathematical statements is correct?
 - a. $3/10 > 1/10$
 - b. $1/10 < 1/20$
 - c. $7/10 = 9/10$
 - d. $8/10 < 4/10$
2. In a basketball game, Player 1 made three (3) free throws shots; Player 2 made five (5) free throw shots; Player 3 made two (2) free throw shots. Put their total points in order from smallest to largest:
 - a. $2 > 3 < 4$
 - b. $3 > 5 > 2$
 - c. $2 < 3 < 4$
 - d. $6 < 7 < 9$

Module 3.0: Engineer a Hole-in-One

1. True or False: Engineers need to explore a problem prior to creating a solution.
2. Which of the following best describes criteria in the EDP (Engineering Design Process)?
 - a. Requirements
 - b. Steps
 - c. Setbacks
 - d. Building materials
3. Select the option from below that best completes the EDP (Engineering Design Process):
 Identify the problem → _____ → Build → _____ → Redesign
 - a. Build, Present
 - b. Brainstorm, Present
 - c. Recharge, Focus
 - d. Rebuild, Design

Module 4.0: Finding the Sweet Spot: Force of a Golf Swing

1. True or False: The amount of force in a golf swing does not affect the push on the golf ball.
2. If the force of a golf swing is stronger the ball will go...
 - a. Slower
 - b. Shorter
 - c. Farther
 - d. Smaller
3. The angle of the golf club face affects the ball's...
 - a. Momentum
 - b. Drive
 - c. Direction
 - d. Speed

Module 5.0: Stroke of Energy

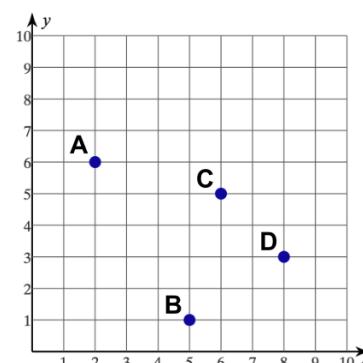
1. True or False: *Distance* and *time* are equally important parts in determining *Velocity*.
2. Which of the following is accurate when hitting a ball...
 - a. More body movement = more direction
 - b. More body movement = less movement
 - c. More body movement = less energy
 - d. More body movement = more velocity

Module 6.0: Dimensions of the Court

1. True or False: A coordinate plane system can calculate the distance a player has to travel to hit the ball from their opponent.

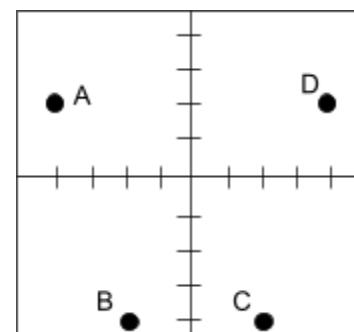
2. Which of the following is the coordinate for Point B?

- a. 1,5
- b. 5,1
- c. 1,6
- d. 4,2



3. Which of these points is located in coordinate (2,-4)?

- a. Point A
- b. Point B
- c. Point C
- d. Point D



Module 7.0: Forces in Soccer

1. True or False: Objects transfer energy when they collide.
2. Select the best option from below that best completes the following statement:
more _____, more _____.
 - a. Force, energy
 - b. Energy, motion
 - c. Force, Force
 - d. Motion, Force

Module 8.0: Penalty Shootout: Kicks and Probability

1. True or False: A penalty kick in soccer is largely based on chance.
2. A _____ is a claim that one assumes is true based on observations and background information; supported or not supported by experimental evidence.
 - a. Conclusion
 - b. Scientific Method
 - c. Theory
 - d. Hypothesis
3. Which of the following equations is accurate to determine shots made based on the following statement:
I scored 6 out of 10 shots taken.
 - a. $10 - 6 = 4$
 - b. $6 + 4 = 10$
 - c. $10 - 4 = 6$
 - d. $4 - 10 = -6$
 - e. None of the above