

## Assessment Questions

### Module 1.0: Skating in the Zone

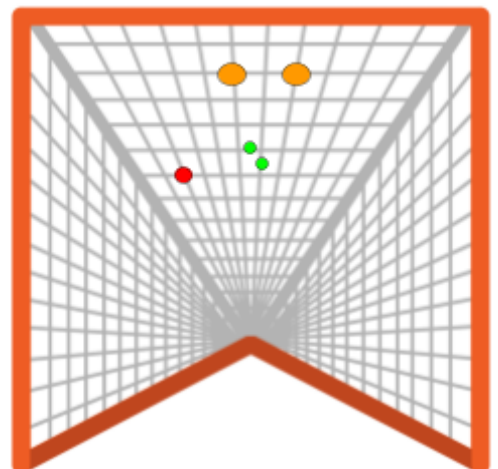
1. A player skates around a rectangle that measures 50 feet long and 25 feet wide. Which equation could be used to find how far (perimeter) the player skated?
  - a.  $L \times W = 50 \times 25$
  - b.  $L + W + L + W = 50 + 25 + 50 + 25$
  - c.  $4L + 4W = 4(50) + 4(25)$
  - d.  $L + W = 50 + 25$
2. A player skates around a rectangle that measures 50 feet long and 25 feet wide. Which equation could be used to find how much area the player skated?
  - a.  $L \times W = 50 \times 25$
  - b.  $L + W + L + W = 50 + 25 + 50 + 25$
  - c.  $4L + 4W = 4(50) + 4(25)$
  - d.  $L + W = 50 + 25$

### Module 2.0: Playing on Ice

1. True or False: Molecules and Molecular Structure are NOT related?
2. Which of the following is considered a liquid?
  - a. Water
  - b. Oxygen
  - c. Ice
  - d. None of the above
3. Which of the following is considered a solid?
  - a. Oxygen
  - b. Vapor
  - c. Ice
  - d. Water

### Module 3.0: Energy in Lacrosse

1. True or False: The faster an object moves the more energy it produces.
2. If an attacker throws a ball 15 feet for 3 seconds, what speed is the ball traveling?
  - a. 45 feet per seconds
  - b. 5 feet per seconds



c. 18 feet per seconds

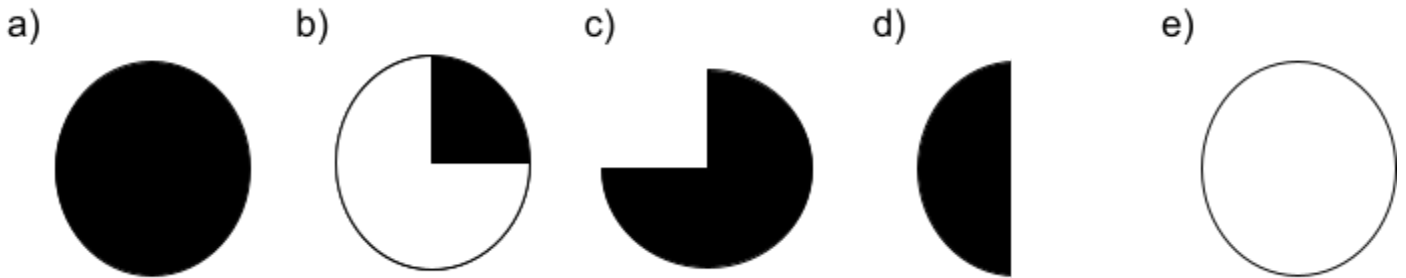
**Module 4.0: Wearable Technology**

1. True or False: The best wearable technology will avoid constraints and meet criteria.
2. True or False: Energy can be transferred.
3. How can technology help athletes?
  - a. Help them train to be faster.
  - b. Know where they are on the field.
  - c. Tell them to speed up or slow down.
  - d. Coaches can talk to them.

**Module 5.0: I'd Love to Keep Score**

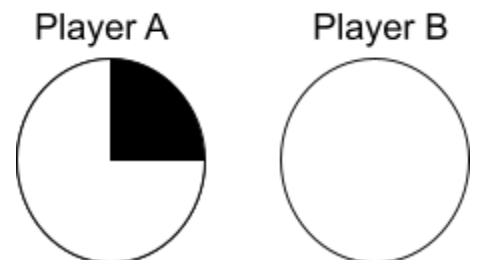
- 1) Replace the blank with (>, <, =) to represent the score in tennis.
  - a) 15 \_\_\_ 30
  - b) 40 \_\_\_ Love
  - c) Deuce \_\_\_ 15

- 2) If the shaded part of the model represents the points scored, which fraction model best represents when a player has 30 points?



- 3) If the shaded part of the model represents the points scored, what is the score of the tennis match?

- a) Player A - 45 Player B - Love
- b) Player A - 15 Player B - Winning Point
- c) Player A - 40 Player B - Winning Point



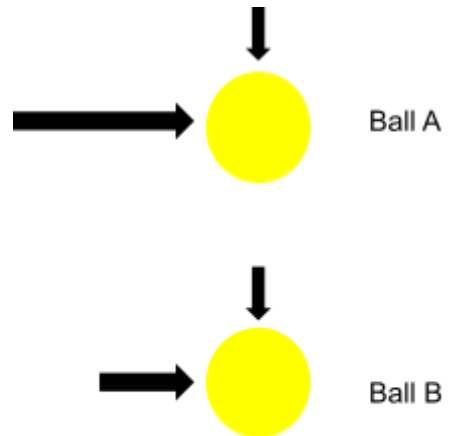
d) Player A - 15 Player B - Love

**Module 6.0: May the Force be with You**

1. What causes the tennis ball to be in motion?
  - a. Radiation Energy
  - b. Collision
  - c. Balanced Forces
  - d. Unbalanced Forces

2. What does the arrow on top of the ball pointing down represent?
  - a. The hit
  - b. Gravity

3. Which ball would go further and faster?
  - a. Ball A
  - b. Ball B



Please use graphic for questions 2 and 3.

**Module 7.0: Let's Serve**

1. You get \_\_\_\_ attempts to serve the ball in.
  - a. one
  - b. two
2. Place (>, <, =) to compare the higher fraction representing the number of serves in
  - a. 7 out of 10 \_\_\_\_\_ 40 out of 100
3. If a student was able to hit  $\frac{1}{3}$  of their serves in and they served the ball 30 times, how many times would they serve in?
  - a. 3 times
  - b. 10 times
  - c. 15 times
  - d. 20 times
4. If a student was able to hit  $\frac{3}{4}$  of their serves in and they served the ball 40 times, how many times would they serve in?

- a. 10 times
- b. 15 times
- c. 25 times
- d. 30 times

### **Module 8.0: Advancements in Tennis**

1. Which steps are correct for the EDP (Engineering Design Process)?
  - a. Brainstorming → Build → Present → Identify the problem → Redesign
  - b. Identify the problem → Brainstorming → Build → Present → Redesign
  - c. Present → Identify the problem → Brainstorming → Build → Redesign
  - d. Identify the problem → Build → Redesign → Present
  
2. True or False  
Using technology in tennis will benefit all stakeholders.

## **Assessment Key**

### Module 1.0: Skating in the Zone

1. B
2. A

### Module 2.0: Playing on Ice

1. F
2. A
3. C

### Module 3.0: Energy in Lacrosse

1. True
2. B

### Module 4.0: Wearable Technology

1. True
2. True
3. A.

### Module 5.0: I'd Love to Keep Score

- 1)
  - a. <
  - b. >
  - c. >

2) D

3) D

Module 6.0: May the Force be with You

1) D

2) B

3) A

Module 7.0: Let's Serve

1) B

2) a. >

3) B

4) D

Module 8.0: Advancements in Tennis

1) B

2) False