Assessment Questions

Grades 3-5

Module 1.0: The Game Evolved

1) What property of a tennis ball has the **most** impact on its function?
   a) Weight
   b) Size
   c) Material
   d) Color

2) What property of a tennis ball does **not** have an impact on its function?
   e) Weight
   f) Size
   g) Material
   h) Color

3) What material is the best to use for the frame of a racket?
   a) Wood
   b) Graphite
   c) Rubber
   d) Cork

Module 2.0: Dimensions of the Court

1) _____ lines are the same distance apart and will never intersect (parallel, perpendicular, symmetric)
2) _____ lines intersect at a 90 degree angle (parallel, perpendicular, symmetric)
3) A line of symmetry is a horizontal or vertical line that splits a shape equally in half. (True/False)

Module 3.0: The Playing Surface

1) What three primary surfaces is tennis played on?
   a) Sand, Grass, Concrete
   b) Clay, Concrete, Grass
   c) Grass, Sand, Clay
   d) Clay, Concrete, Grass

2) Based on the speed of the ball on the court, order the playing surfaces from (1) slowest to (3) fastest .

____ Grass Court ____ Concrete Court ___ Clay Court

3) Based on the height of the bounces of the ball on the court, order the playing surfaces from (1) lowest bounce to (3) higher bounce

____ Grass Court ____ Concrete Court ___ Clay Court

4) Some tennis matches are played outdoors. Rain can affect the playing surface, and how players have to react. Match the court description to the effect rain has on the surface.

Grass Court	Wet areas on the court will decrease the quality of the ball bouncing, slowing the game down. This, coupled with a very slippery surface when wet, will create a slower pace of play.
Concrete Court	As this surface becomes wetter, the slicker it becomes, making it very difficult for players to move. The surface will stick to the ball, making it challenging for players to see and hit the ball with accuracy.
Clay Court	Water will settle on certain areas of the court, making it difficult for players to move quickly to the ball. In addition, water dampens and adds weight to the ball, decreasing speed when hit during play.

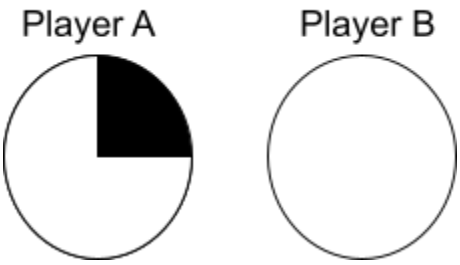
<u>Module 4.0: I'd Love to Keep Score</u>

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?

a) b) c) d) e)

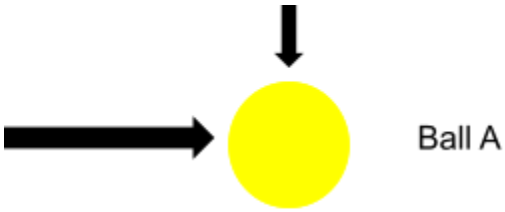
3) If the shaded part of the model represents the points scored, what is the score of the tennis match?
    a) Player A - 45 Player B - Love
    b) Player A - 15 Player B - Winning Point
    c) Player A - 40 Player B - Winning Point
    d) Player A - 15 Player B - Love



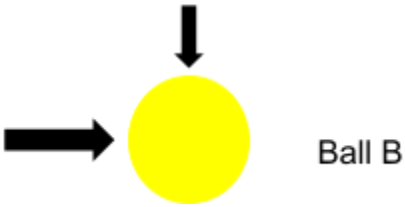
Module 5.0: May the Force be with You

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



Module 6.0: Stroke of Energy

1. The more body movement involved in hitting a tennis ball, the _____ energy it has.
    a. less
    b. more

2. If the velocity of the ball is doubled, the energy of the tennis ball _____.
    a. is reduced by half the amount
    b. remains the same
    c. is increased by double the amount

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 ⅓ 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 ¾ 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.