Trial Reaction Ball™
(Pronounced “TREE-AL”)

Item # 18226

• Overview. Improve hand/eye coordination! Slightly offset weighted ball offers irregular motion when tossed or bounced. Great for sports training and building agility and quick reaction time.

• What Are the Educational Applications?
The Trial Reaction Ball is useful in developing a variety of skills necessary for sports performance at various ages and ability levels. The unique offset, weighted design allows for unpredictability when tossed or bounced in different directions. Fun, simple, and flexible in use, the Trial Reaction Ball is ideal for a variety of training programs. These balls can improve overall agility and reaction time performance in all sports and improve fitness levels. Additional skills developed include:
  • **Balance:** The ability to attain, recover and keep equilibrium.
  • **Bilateral movement:** Ability to use both sides of the body with equal efficiency.
  • **Depth perception:** Ability to judge the distance of objects and move accurately in relation to them.
  • **Eye Hand coordination:** Ability of the vision system to coordinate the information received through the eyes to control, guide and direct the hands in the accomplishment of a given task.
  • **Focus:** Close or narrow attention; concentration.
  • **Focus change:** Ability to look from near to far and vice versa without blur.
  • **Peripheral awareness:** Strengthens the muscles that control peripheral vision and improves ability to recognize objects in outermost visual range.
  • **Tracking:** Process of following something.

• How Can I Use This Product With My Students?
  • **Where:** Anywhere there is a hard, even surface (indoors or outdoors).
  • **Age:** Eight years through adult.
  • **Group Size:** From one person to a group of 10 people.
  • **Basic Skills Needed:** Throwing, catching, ability to move quickly in all directions.

**The Games/Activities**

• **Activity #1: Spring Into Action**
  a. **Objective:** To work individually to catch the Trial Reaction Ball in the fewest number of bounces.
  b. **NASPE Standard:** 1, 2, 3, 4, 5, 6
  c. **Set Up:** Make sure you are using a properly inflated ball in a clear, safe area.
  d. **How to Play:** Students have their own Trial Reaction Ball and stand keeping their feet shoulder width apart and knees slightly bent. Students will drop the ball at varying heights (knee, waist, chest height) trying to catch the ball in the fewest number of bounces (one or two is ideal) with both hands.
  e. **Extensions:**
     • Drop the ball from head height.
     • Drop the ball from the varying heights listed above slightly in front of (from 1 to 4’) or behind the body.
     • Play the game in groups of two: one partner holds the ball and drops it at the heights listed above. The other partner tries to catch the ball in the fewest number of bounces.
     • To make the game easier, allow the students to catch the ball in as many bounces as it takes.
     • To make the game harder, catch the ball in one hand. Catching the ball in the dominant hand is easier. Catching the ball in the non-dominant hand is harder.
**Activity #2: Pepper**

a. **Objective:** To work individually to catch a rolling Trial Reaction Ball.

b. **NASPE Standard:** 1, 2, 3, 4, 5, 6

c. **Set Up:** Stand between 5-6' away from a wall holding the Trial Reaction Ball with 3' in between each student (use polyspots or tape to mark the distance).

d. **How to Play:** Students roll the ball to the wall so it rebounds back. Students need to stay in a fairly low position in order to catch the ball. Catch the rolling ball with either two hands (easier) or one hand (harder).

  **Extensions:**
  - If catching the rolling ball in one hand, catching it with the dominant hand is easier than catching it with the non-dominant hand.
  - Toss the ball against the wall so it bounces back and catch it using one or two hands in the fewest number of bounces. Catching the ball in the dominant hand is easier. To make the game easier, allow the students to catch the ball in as many bounces as it takes.
  - Play the game in partners with one partner rolling the ball to the wall, moving out of the way so the other partner can catch it.
  - Play the game in groups of two with partner standing approximately 10’ away from each other (distance varies given student’s skill level with a closer distance being easier). One partner holds the ball and throws or rolls it to the left or to the right of their partner. The other partner tries to catch the ball in the fewest number of bounces.

**Activity #3: Quicker**

a. **Objective:** To be the first of two players to catch the Trial Reaction Ball.

b. **NASPE Standard:** 1, 2, 3, 4, 5, 6

c. **Set Up:** Partners stand approximately 4-6’ apart, facing each other. Use one polyspot per student as a visual cue for where to stand. Optional: Place a plastic hoop in between the two partners to be used as a visual cue to throw the Trial Reaction Ball into.

d. **How to Play:** Player 1 tosses and Player 2 attempts to catch the ball on any number of bounces they want. If successful they receive that # of points. If the ball rolls, touches a wall or other object or touches the player before the catch no points are awarded. Player 2 then tosses for Player 1 and Player 1 catches the ball on their choice of the # of bounces. This continues until one player reaches 11 points first.

  **Extensions:**
  - Increase or decrease the distance and/or height of toss based on student skill level (increase the distance to make the game harder).
  - Make the game easier by having the students catch the ball in the dominant hand. Make the game harder by having the students catch the ball in the non-dominant hand.
  - Drop the ball from varying heights and/or force.
  - Increase or decrease the number of points needed to win based on student skill level (beginners = fewer points).
  - Assign different point values to different catches:
    - One point: Catch with two hands; on two bounces; etc.
    - Two points: Catch with dominant hand.
    - Three points: Catch with non-dominant hand; behind the back (or any trick catch); etc.
•Activity #4: Wall Ball
  a. **Objective:** To score the most points by catching the Trial Reaction Ball while trying to prevent opponent from scoring.
  b. **NASPE Standard:** 1, 2, 3, 4, 5, 6
  c. **Set Up:** Measure 15’ from the base of wall to establish a service line. The wall can be indoors (a gymnasium wall divided into 20’ sections using tape with each set of partners occupying one section) or outdoors (hand ball court or any length of wall divided into 20’ sections as stated).
  d. **How to Play:** Place students into partners. One of the two partners puts the Trial Reaction Ball into play by serving it from behind the service line. The other partner may stand anywhere on the court. Serving the ball includes throwing it with one or two hands so that it bounces once in between the service line and wall. The ball must rebound off the wall in between the wall and the service line. Any ball bouncing behind the service line or more than two times before hitting the wall results in the server losing his/her turn, and one point being awarded to the opponent. One point is awarded to the server each time the opponent fails to catch the ball after one bounce. Each player serves twice on a rotating basis. The first player to reach 15 points wins.
  e. **Extensions:**
     • Increase or decrease the winning score based on student skill level.
     • Increase or decrease the number of times the ball is allowed to bounce before catching it based on student skill level (increasing the number of times makes the game easier).
     • Assign different point values to different catches:
       • One point: Catch with two hands; on two bounces; etc.
       • Two points: Catch with dominant hand.
       • Three points: Catch with non-dominant hand; behind the back (or any trick catch); etc.
     • Increase or decrease the serving line based on student skill level (the closer the service line to the wall makes it easier for opponent to score).

•Activity #5: Reaction Ball Tennis
  a. **Objective:** To score the most points by catching the Trial Reaction Ball while trying to prevent opponent from scoring.
  b. **NASPE Standard:** 1, 2, 3, 4, 5, 6
  c. **Set Up:** Use tennis or pickle ball courts. Play singles or doubles.
  d. **How to Play:** This game is similar to “Activity 4: Wall Ball,” except the game can be played by singles or doubles and is played on a tennis or pickle ball court. Use tennis rules and lines based on the skill level of students.
  e. **Extensions:** Same as “Activity 4: Wall Ball.”

•Activity #6: Roller Ball
  a. **Objective:** To catch the Trial Reaction Ball before it crosses the end line.
  b. **NASPE Standard:** 1, 2, 3, 4, 5, 6
  c. **Set Up:** Create two parallel lines approximately 50’ apart using masking tape.
d. **How to Play:** Students are placed in groups of two with each group of two standing near each other on one of the lines (use polyspots as visual cues indicating where to stand). One player has the ball and rolls it from the starting line towards the line on the opposite side (as “straight” as possible). As soon as the ball starts rolling, the other partner tries to catch it before it reaches the line on the opposite side. Switch roles after each roll.

e. **Extensions:**
   - Use a point system: i.e. one point if opponent catches the ball before it crosses the line or one point to the roller if the ball crosses the line.
   - Integrate math concepts by removing points from the unsuccessful player.
   - Roll the ball using non-dominant hand.
   - Catch the ball using one (harder) or two (easier) hands as well as with the dominant hand (easier) or non-dominant hand (harder).
   - Use kicking skills (i.e. soccer pass).
   - Increase or decrease the distance between the two lines based on student skill level (the closer the lines are to one another, the harder the game).

- **Safety Issues & Concerns**
  - Tell the students to be careful when chasing the ball because it is weighted, which makes it unpredictable as it moves. Therefore, it is helpful to warm up before the games, paying close attention to ankles and legs.
  - Students need to be aware of one another as to not bump into each other while playing the games since the ball moves in unpredictable ways.
  - Deflate the ball for beginner students. This will slow it down and reduce its overall movement. Deflating the ball will make it easier for students to react to its movement and thus increase success rate.

**Meets These NASPE Standards**
1. Demonstrates competency in motor skills and movement patterns needed to perform a variety of physical activities.
2. Demonstrates understanding of movement concepts, principles, strategies, and tactics as they apply to the learning and performance of physical activities.
3. Participates regularly in physical activity.
4. Achieves and maintains a health-enhancing level of physical fitness.
5. Exhibits responsible personal and social behavior that respects self and others in physical activity settings.
6. Values physical activity for health, enjoyment, challenge, self-expression, and/or social interaction.