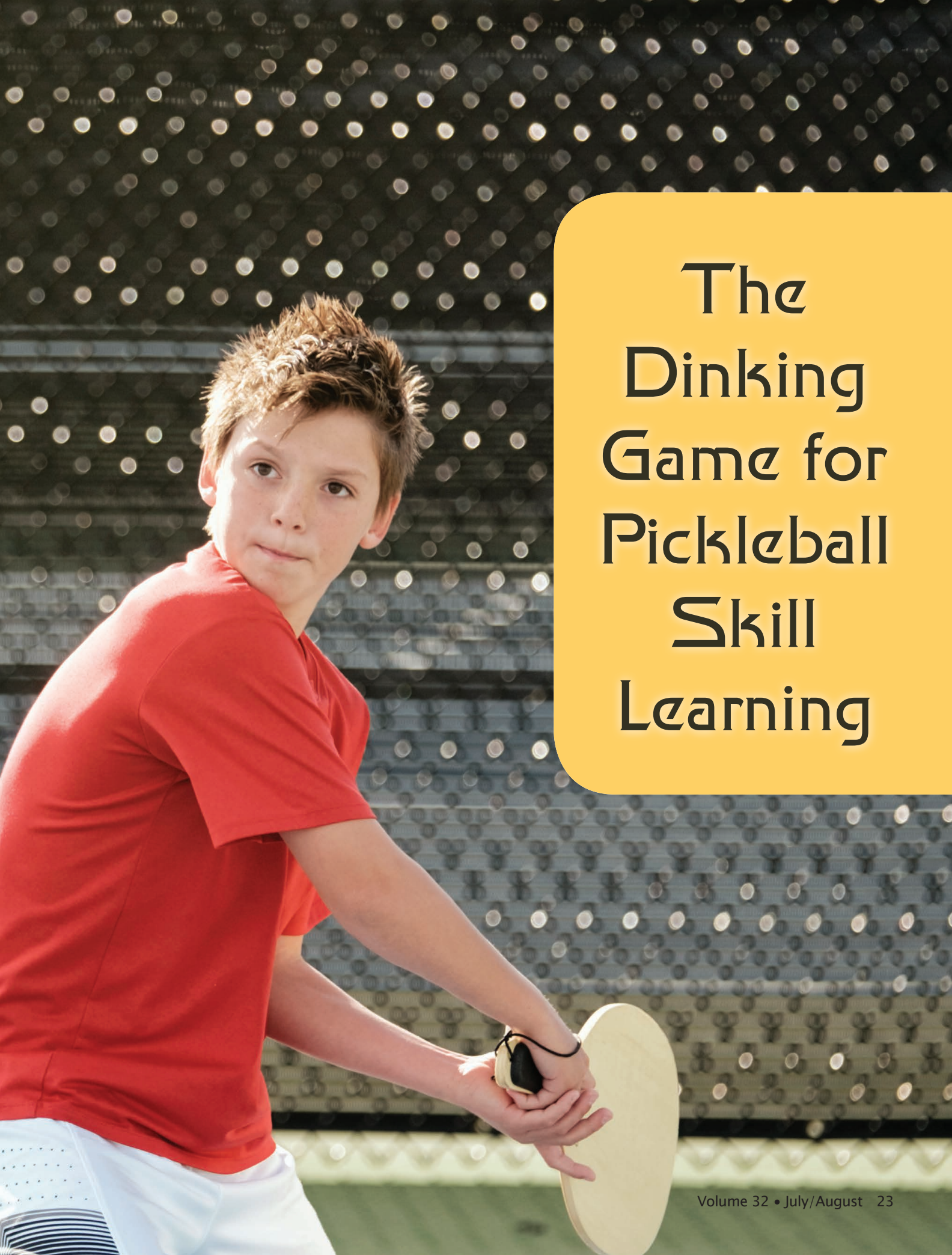




“You Dinked My Battleship”:

By James Zagrodnik

Pickleball's origin dates back to 1965 (www.usapa.org) and was initially presented in the *Journal of Physical Education and Recreation* in 1976 by Rex Davis in a short one-page introduction to the game's history, rules, scoring and penalty zone. Since then, the rules of pickleball have changed very little but advancements in paddle technology and ball construction have recently transformed as rapidly as pickleball's popularity. According to the United States Pickleball Association (USAPA 2018; www.usapa.org), pickleball is currently one of America's fastest-growing sports and is estimated to have 2.8 million players as of 2017 and a growth rate of 1.8% from 2014 to 2015.



The Dinking Game for Pickleball Skill Learning

One contributing factor to this recent growth could be how easy it is to learn (Leach & Colgate, 1982). With a large racquet face area and short handle, a beginner's success rate at hitting the ball is very high. The ball is larger, lighter, and typically moves at a slower rate than balls in all the other racquet sports, which also allows for greater reaction time and aides in decision making and capacity to have ball contact. The under-handed swinging motion of the arm and paddle for most shots may also assist beginners in striking the ball more consistently than many other racquet-sport swing types. In addition, the court is relatively small — the size of a badminton court. Thus, when playing doubles, as the game is most often played, limited

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mobility and court coverage is required, resulting in more time to effectively make a good stroke on the ball. Adding to skill learning can be that the net is lower than a tennis net, which possibly allows for high rates of success for beginners to get the ball over the net and in play.

It should also be mentioned that the social nature of pickleball to have fun and be active lends itself to welcoming all people no matter their skill level. The relative ease to learn the basic skills to play pickleball allows people to feel accomplished and successful very early on in their learning progression, thus encouraging continued participation and willingness to play the game.

A second contributing factor to pickleball's success may be the growing population of senior citizens in the United States and the popularity of pickleball in this age group. Pickleball has become a serious leisure recreation activity for older adults and has shown to have a positive relationship with subjective well-being, which may add significant value to older adults' lives, thereby contributing to successful aging (Heo, Ryu, Hyunmin, Chan Hyung Kim, & Rhee, 2018). The U.S. population over the age of 65 is expanding faster than the growth of the total population: 15.1% for older adults as compared to 9.7% for total population growth (Werner & U.S. Census Bureau, 2011). The USAPA identifies that 42.7% of its members who are core participants are 65+ years old (defined as playing more than eight times a year) as compared to 31.8% for 55- to 64-year-olds, 19.2% for 35- to 54-year-olds, and 6.3% for those 34 and younger.

However, the reverse trend is seen when examining casual pickleball players (defined as those who play less than eight times a year). Individuals under 34 are more casual players than any other group, with those who are six to 17 years old representing 18.5% of all casual players in the United States. Thus, it appears that older adults currently participate in pickleball more frequently than younger populations. These trends could change as pickleball is introduced into more physical education learning environments.

Tsuda and Chang (2019) presented sequencing movement tasks to teach one-handed sidearm striking patterns with a short implement. Physical educators using these strategies in conjunction with pickleball, which is a short-implement racquet sport, may enhance kindergarten through second graders' one-handed sidearm striking skills more easily than many other racquet sports, and also establish movement patterns that can lead to positive transfer for more complex racquet sports later in life. Mitchell and Oslin (1999) demonstrated tactical transfer learning from badminton to pickleball, suggesting that badminton strategies were successfully applied to the game of pickleball. Research on the opposite effect is lacking, but it could be suggested that a similar skill transfer could occur from pickleball to other racquet sports. If physical educators develop strategies to teach pickleball sooner (see Tsuda & Chang, 2019) they may also create a positive transfer of skills and tactical strategies when teaching more complex racquet games. Research demonstrating these theories is much needed in physical education pedagogy in relation to pickleball.

Despite the lack of research related to pickleball and pickleball-teaching methodologies, the recent growth of pickleball across the United States, the relative ease to learn to play the game, the potential to possibly transfer skills to other racquet sports, and the opportunity for lifelong participation in this game should convince physical educators that they should consider pickleball as part of their curriculum. However, ideas on how to teach pickleball are lacking. To begin providing pickleball curriculum ideas and proper skill development, this article explains the dink shot and shares a game that was created to enhance the dinking skills of students called "You Dinked My Battleship."

The Dink

When teaching pickleball, physical educators should be aware that the game requires both power and finesse shots to be played at the right time success. (For teachers who are interested in learning pickleball basics or are unsure how to teach pickleball, the author recommends contacting a local pickleball ambassador for a school visit. The ambassador may be able to provide lessons for the teacher and the students and can be found using this link: <https://www.usapa.org/usapa-ambassadors/>.) One of the critical skills in pickleball is known as the dink shot and relies heavily on finesse. The dink shot occurs when one player tries to get the ball to land in the opposing team's "kitchen" (the area between the non-volley line and the net; i.e., the first seven feet from both sides of the net) while being slightly behind their own non-volley line. An ideal dink utilizes the continental grip (which is obtained when holding the racket as if it were an axe) to allow both forehand and backhand dinks to be performed without changing grip styles, clears approximately 18" over the net, and lands in the opposing kitchen. Where in the kitchen the dink lands will depend on where the opposing players are, how confident the dinker is in getting the ball closer to the net without giving the other team a potential advantage, and the amount of touch the player can place on the ball itself: if too hard, the dink is easily returned; if too soft, the ball may not even get over the net in the first place.

To be a good dinker, the player should be in the 'ready' athletic stance about one half step behind the non-volley line. As mentioned previously, they should be using the continental grip. A square or side stance can be used, although stance preference is often established by each individual as he or she learns the skill. With either stance, the player should step (either a full or half step) with opposition and swing their arm in a small "U" motion while keeping the face of the paddle perpendicular to the ground. A skill cue that can be utilized to help students learn the swing path is "rock the cradle," similar to how a cradle will gently rock back and forth. The swing is not a big swing, nor is it forceful; the follow-through should not go over one's shoulder as in a ground stroke swing. The goal is to help push or guide the ball back over the net with a focus on placement and ball height, not on power and pace. However, as dinking skill level improves, utilizing power and pace as strategic changes can be encouraged. The player's dominant or nondominant hand can be used for the dink shot, or even switching hands mid-point is allowed.

A Dinking Game

"You Dinked My Battleship" was initially created in a Methods of Teaching Elementary Teachers Physical Education

course with the objective of teaching students how to learn and perform the dink. As part of the course, the author discussed and demonstrated numerous ways to make cross-curricular connections in physical education, and the idea for "You Dinked My Battleship" came from incorporating World War II history. Since its inception, this game has been enjoyed by learners ranging from K-12 physical education students, university-level physical education students, community players, and even physical education teachers during workshops at regional conventions and seminars.

The essential equipment (other than a playing court, rackets and balls) to play "You Dinked My Battleship" includes six hula hoops and two poly spots per team of two players (games have been played with three or four per team, depending on class size and space available) on each playing area/court. The game consists of a series of seven progressive challenges (or levels) that add difficulty. Games can be played that include all the rules or can leave some rules out, depending on students' skill level or even to change the game dynamics from day to day and keep students focused and engaged. For a greater challenge, a teacher could enforce one set of rules for one team and assign their opponents a different set of rules.

Level 1: Battleships Only

Each team places their hula hoops on their side of the net in their "kitchen" area (see Figure 1 for a possible game setup). These hula hoops are their battleships. The goal is for each team to sink the battleships on the other side of the net before their own battleships are all sunk. This entry-level game allows students to become comfortable with the dink mechanics while having an observable goal to accomplish: getting the ball to land in a specific area (the hula hoop). The game begins by dinking one time on each side as a ready phase, then after that





**Figure 1. “You Dinked My Battleship” gameplay setup.
The yellow poly spots represent the Doolittle Raiders variation.**

teams try to get the ball to land in the hula hoops. Rallies are encouraged over start-and-stop play. Thus, a team may get to sink multiple hula hoops before the point is over. A rally is over when the ball lands out of bounds, cannot be returned, or does not go over the net. After each rally, each team removes the hula hoop(s) that were sunk. Game play continues until one team has all of their battleships sunk. Teams can reset and play as many times as allowed.

Level 2: Land Mines

Game play occurs with the addition of a penalty if a player dinks the ball past the non-volley line. When a dink goes too far, the player has hit a land mine and must remove one of their own team’s battleships. Similarly, if the player chooses to play in a rally, he or she can have multiple land mines happen in one rally.

Level 3: Kamikazes

This level consists of the addition of a penalty. If the ball does not go over the net, the team loses one of their battleships. This option does not allow for multiples in a rally because if the ball fails to get over the net the rally is over.

Level 4: Doolittle Raiders

This level has the addition of a reward. Teams can place two (fewer or more depending on teacher or student choice) poly spots anywhere they would like on the opposite side of the net (or for a greater challenge, on their own side of the net for their opponents) to hit. While dinking, if a team hits a poly spot on the opposite side of the net, they get one of their battleships back. This can be included in a rally format and thus a team could earn multiple battleships back in one rally if they hit a poly spot multiple times. Some students strategize by placing

a poly spot inside a hula hoop, so if they hit the poly spot they force their opponents to remove the hula hoop while they get to add one to their side of the kitchen.

Level 5: Air Force

This level has a protection emphasis. Players can protect their battleships by hitting the ball in the air before it lands in a hula hoop. It is important to note that this is not a good strategy when playing pickleball, but students have really liked the idea of being able to protect their battleships when they can. So the teacher must make sure to emphasize that doing this is okay for “You Dinked My Battleship” but most often not appropriate in a traditional game of pickleball because if you volley a dink it often leads to the other team having the advantage (typically because it results in a poor shot return, setting up the other team for an aggressive return of their own). It is also best to incorporate official pickleball rules with this version so that students cannot go into the kitchen and volley the ball to protect their battleships. Otherwise bad habits will be formed when it comes to playing real pickleball because players are not allowed to be in the kitchen and volley the ball.

Level 6: Wing Man

This level introduces play with two balls going at the same time. This usually works best if the balls are hit back and forth directly across from each person. It is a fun way to get more opportunities to learn and practice by increasing striking percentage. Typically, when one ball bounces out of bound, fails to go over the net, or cannot be returned, play is stopped and battleships are removed or added (if necessary) and then play starts again until all the battleships are sunk.

Level 7: Crossfire

This is played similarly to “Wing Man” but the balls are hit diagonally. This is a great way to really practice a dink shot to get out of a tough situation because the ideal strategy for when a ball is hit really close to the net is to go diagonal, not straight over the net, so the ball has more distance and time to get up over the net. Some students invented a modification for this level they called “Fireball,” where if the two balls hit each other in the air a sudden-death winner takes all single-ball rally occurs. In this case, play occurs as previous versions of “You Dinked My Battleship” with only one ball, and the winner is declared as soon as the ball fails to go over the net, is hit out of bounds, or cannot be returned by the opposing team no matter how many battleships are left on their side.

For competitive students, “You Dinked My Battleship” offers a concentrated focus on enhancing what is considered the most important and difficult-to-master shot in pickleball. Upper-level players are often overserved, playing dinks for over 75% of their points, as they patiently wait for their opponents to leave an opening or make an unforced error. Older players who just seem to stand in one spot often beat their teenage opponents who are running all over the place thanks to well-placed

dinks. The quickest way up the skill ladder in pickleball is to get early and frequent practice with the dink. “You Dinked My Battleship” provides these competitors the challenge of game play while focusing on enhancing their skill one particular shot. For the less competitive students, “You Dinked My Battleship” allows for the social aspects of pickleball to be played out with high rates of encouragement, trial and error acceptance, and a more casual approach to competition.

Students have been observed developing self-evaluation and teamwork skills by expressing how and why they lost a battleship and working together as both teammates and opponents to reduce their own errors. Thus, this game has demonstrated not just individualized skill enhancement but also encourages the social nature of pickleball in that players help one another get better.

Incorporating the Game in Physical Education

This game can be played on pickleball courts, modified tennis or badminton courts, basketball gym floors, and even carpeted areas. For those with limited gym space and many students, a good modification is to string a net across the court and not play with sideline boundaries except those implicitly devised by the teams playing against each other. This method allows for several teams to play in smaller areas while still getting the chance to learn and practice their dinks. The class could even be split into two large teams for a “You Dinked My Battleship” extreme challenge! This game can also be adapted with different ball types (balloons, tennis balls, bouncy balls, runner balls, and others) and racquet types (tennis, racquetball, squash, and paddles) to include students with differing ability levels and provide modifications or challenges. In addition, students with developmental disabilities can also participate in this game with simple modifications. For example, playing the game without the net, using tennis racquets, allowing multiple bounces, or using balloons instead of pickleballs are just a few easy ways to get all students participating and engaged.

With this game, teachers can also structure their lessons to include ready positions, moving up together and in parallel to the non-volley line, how to slide and cover for each other when teammates get pulled one way or the other, teamwork, communication, how to come back when down (in some classes a teacher could purposefully start a game with one team having more battleships than another), and how to maintain focus when ahead and seal the victory. Thus, teachers can hide additional learning objectives by using “You Dinked My Battleship” as a motivator to practice and play.

This game lends itself to be played as a pre- or post-class activity or can be used as an instant activity while the class waits for others to dress out and arrive to the gym, needing limited oversight once the rules are learned and established. It is also a fast-paced game that can be played tournament style, such as round robin, double elimination, or a whistle-stop tournament.

Summary

With the general growth of pickleball across the country, and six- to 17-year-olds representing the largest group of casual players in pickleball, physical education teachers need more resources and research on pickleball methodologies, curriculum development, and effects on skill development. Particularly as individuals age, having skills that promote wellness and lifetime physical activity is critical, and pickleball is a game that encom-

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passes skill sets that may promote lifelong participation. In addition, as a cross-generational lifetime activity, pickleball may uniquely contribute to younger generations developing more positive attitudes toward older adults (Reynolds, Daum, Frimming, & Ehlman, 2016), and perhaps even toward their perceptions of aging later in life.

“You Dinked My Battleship” can be incorporated into the physical education curriculum no matter the developmental level of students, which may help establish sound movement patterns for successful pickleball play and transcend to lifelong participation for generations to come. This fun and exciting game can help learners focus on the dink with high rates of active learning time. It allows for self-discovery learning while also requiring patience and strategy. Teachers can use the game in self-evaluation, peer-evaluation and teacher evaluation methods to assess the psychomotor, cognitive and affective domains. So, grab a paddle and some battleships! Good luck dinking before you get sunk!

References

- Davis, R. (1976). Pickle ball. *Journal of Physical Education and Recreation*, 47(6), 48–48. doi:10.1080/00971170.1976.10614226
- Heo, J., Ryu, J., Hyunmin, Y., Chan Hyung Kim, A., & Rhee, Y. (2018). Importance of playing pickleball for older adults' subjective well-being: A serious leisure perspective. *The Journal of Positive Psychology*, 13(1), 67–77. doi:10.1080/17439760.2017.1374438
- Leach, J., & Colgate, J. A. (1982). Pickle-ball—For all Ages. *Journal of Physical Education, Recreation & Dance*, 53(6), 84–86. doi:10.1080/07303084.1982.10629442
- Mitchell, S. A., & Oslin, J. L. (1999). An investigation of tactical transfer in net games. *European Journal of Physical Education*, 4(2), 162–172. doi:10.1080/1740898990040205
- Reynolds, E., Daum, D. N., Frimming, R., & Ehlman, K. (2016). Pickleball transcends the generations in southwest Indiana: A university and area agency on aging partnership changing the face of aging. *Journal of Intergenerational Relationships*, 14(3), 242–251. doi:10.1080/15350770.2016.1194730
- Tsuda, E., & Chang, S. H. (2019). Teaching one-handed sidearm striking to young children: sequencing movement tasks. *Strategies*, 31(1), 16–23. doi:10.1080/08924562.2018.1538831
- United States of America Pickleball Association (2018). *2018 pickleball fact sheet*. Retrieved from https://www.usapa.org/wp-content/uploads/2018/01/2018-Pickleball-Fact-Sheet-12_31_20172.pdf
- Werner, C. A., & U.S. Census Bureau. (2011). *The older population: 2010*. Washington, DC: U.S. Department of Commerce, Economics and Statistics Administration, U.S. Census Bureau. **S**

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