WHS Physical Education

Study Guides / Handouts
For Major Units

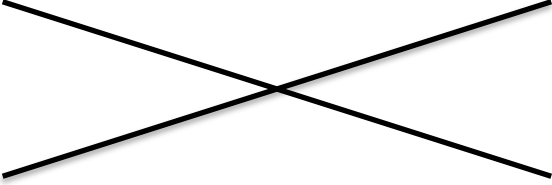**STUDENT NAME**

_____

Year 1 Teacher's Name

_____

Year 2 Teacher's Name

_____

DATE	Workout of the Day	Comments	TIME

DATE	Workout of the Day	Comments	TIME

DATE	Workout of the Day	Comments	TIME

DATE	Workout of the Day	Comments	TIME

DATE	Workout of the Day	Comments	TIME

DATE	Workout of the Day	Comments	TIME

How to Use the Polar E40 Heart Rate Monitor

The Polar E40 Heart Rate Monitor is already programmed and ready to use!		
How to start your heart monitor.		
Step 1	With the watch within 3 feet of your transmitter, press the **RED** button. (Note: When starting the monitor stay at least 3 feet from other students) *Caution: **Do NOT** push the **red** button again until you want to turn OFF your heart monitor. There is NOT a pause feature.*	
Step 2	Use the **BLACK** button to browse heart rate and exercise duration. (If numbers are flashing, your heart rate is outside the target heart rate zone).	
Step 3	<u>Fitness Bullets:</u> **1 solid bullet** = 10 min. in target zone. **6 solid bullets** = one hour If the display reads 00, heart rate is not being received. Bring wrist unit to chest. The display refreshes in 5 seconds.	
Step 4	To **stop** recording, press the **RED** button. The display briefly shows the data recorded and returns to the time mode.	✕

How to recall exercise information

Step 1	Press the **BLACK** button once to pull up SUMMARY.	
Step 2	Press the **RED** button to START. The DATE will be displayed.	
Step 3	Press the **BLACK** button once to display DURATION: Total exercise time.	
Step 4	Press the **BLACK** button once to display IN ZONE: Time in training zone.	
Step 5	Press the **BLACK** button once to display AVG. HR: Average heart rate while exercising.	
Step 6	Press the **BLACK** button once to display MAX. HR: Maximum heart rate while exercising.	
Step 7	Press the **BLACK** button once to display Calories bured while the heart monitor was on.	

After exercise summary, the unit returns to the time of day display.
NOTE: PRESS and HOLD the red button to return to date and time mode.

Assigned Heart
Rate Monitor

_____

Date	Total Exercise Time (Duration)	Time in Target Zone	Average Heart Rate	Maximum Heart Rate	Approximate Calories Burned

NAME _____

Block _____

Date	Total Exercise Time (Duration)	Time in Target Zone	Average Heart Rate	Maximum Heart Rate	Approximate Calories Burned

WHS Heart Study Guide

	Vocabulary and Important Terms:	
1	**Beats per Minute:**	
2	**Maximum Heart Rate:**	
3	**Resting Heart Rate:**	
4	**Recovery Heart Rate:**	
	• **After 5 minutes**	
	• **After 10 minutes**	
5	**Aerobic Exercise:**	
	• **Examples of aerobic exercises** •	
6	**Anaerobic Exercise:**	
	• **Examples of anaerobic exercises**	
7	**VO$_2$**	
8	**VO$_2$MAX**	
9	**Target Heart Rate**	
	• **Lower zone** • **Upper zone**	

	Formula to calculate your heart rate target zone:	
1	**Subtract your age from 220 (maximum heart rate)**	
2	**Enter your resting heart rate**	
3	**Subtract #2 from #1**	
4	**<u>Multiply the answer to #3 by 65% (Convert 65% to .65 to multiply)</u>**	
5	**Add your resting heart rate to the answer to #4. This is your <u>LOWER TARGET ZONE.</u>**	
6	**Multiply the answer to #3 by 85% (Convert 85% to .85 to multiply)**	
7	**Add your resting heart rate to the answer to #6. This is your <u>UPPER TARGET ZONE.</u>**	

WHS Weight Training Study Guide

There are seven fundamental *Principles of Muscle Development* to ensure **gradual improvement in strength** while **reducing the risk of injury**.

1	**Principle of stress adaptation:**	Strength development is _____ and _____ Too much too soon can lead to injury
2	**Principle of tissue rebuild time:**	Moderate to High intensity workouts need _____ hours to recover and rebuild.
3	**Principle of near-maximum resistance:**	
	• **Low weight/high reps.**	Low wt./(_____reps)= lean muscle, _____ Improved _____ capabilities
	• **High weight/low reps.**	Heavy wt./(_____ reps)= increase strength Increase muscle _____

4	**Principle of controlled movement speed:**	5 second repetition =
		  ___ second eccentric phase
		  ___ second concentric phase

5	**Principle of full range movement:**	Full range of motion (ROM) lifting increases _____ and _____
6	**Principle of muscle balance:**	To avoid injury, exercise _____ muscle groups evenly
7	**Principle of continuous breathing:**	Breathe in (inhale) during _____ phase Breathe out (exhale) during _____ phase

F.I.T. Principle: Three approaches to improve fitness/performance . . . often used in combination with one another

8	**F**requency:	How_____? Increase number of workouts per week Example:from two to three workouts per week
9	**I**ntensity:	How _____? Increase the intensity of the workout Example: increase the amount of resistance
10	**T**ime:	How _____? Increase the duration of the workout Example: increase number of repetitions and/or sets

Vocabulary and Important Terms:

11	Repetitions (Reps.):	One _____ lift
12	Set(s):	A _____ of reps
13	Eccentric:	• _____ the weight • 3 seconds • breathe _____
14	Concentric:	• _____ the weight • 2 seconds • breathe _____
15	Antagonistic:	Opposite (opposing) muscle groups Examples: 1. _____/Hamstrings 2. Biceps/_____

Skeletal Muscles: voluntary muscles that allow movement

| 16 | Flexion: | _____the joint angle (example: arm curls) |
| 17 | Extension: | _____ the joint angle (example: leg extension) |

WEIGHT TRAINING

EXERCISE NAME:	**TECHNIQUE:**
MAJOR MUSCLES:	

EXERCISE NAME:	**TECHNIQUE:**
MAJOR MUSCLES:	

EXERCISE NAME:	**TECHNIQUE:**
MAJOR MUSCLES:	

EXERCISE NAME:

MAJOR MUSCLES:

TECHNIQUE:

EXERCISE NAME:

MAJOR MUSCLES:

TECHNIQUE:

EXERCISE NAME:

MAJOR MUSCLES:

TECHNIQUE:

ANTERIOR MUSCLES

Label (1-15), the function (movement) of the muscles.

Anterior
Deltoid

Trapezius   Biceps   Brachioradialis

Anterior Deltoid

Lateral Deltoid

1. _____

Triceps

Pectoralis Major

Latissimus Dorsi

5

Biceps

Triceps

2. _____

External Oblique

6

Brachioradialis

3. _____

Rectus Abdominis

7 _____

Vastus Lateralis

Quadriceps Group   Rectus Femoris

Vastus Medialis

Vastus Intermedius
(hidden under)

Rectus Femoris

Vastus Medialis

4. _____

Tibialis Anterior _____

Gastrocnemius

8

Gastrocnemius

Tibialis Anterior

Anterior

NOTE: above diagram from www.pjhspe.com/gragg/anterior_muscles.html

POSTERIOR MUSCLES

Biceps

Lateral Deltoid

Brachioradialis

Triceps

Posterior Deltoid

Latissimus Dorsi

External Oblique

Gluteus Maximus

Gastrocnemius

Soleus

Trapezius _____ 11

Posterior Deltoid

Triceps _____ 12

Brachioradialis

9

_____

10 _____

Biceps Femoris
Semitendinosus
Semimembranosus

Hamstrings Group

_____ 13

Gastrocnemius _____ 14

Soleus _____ 15
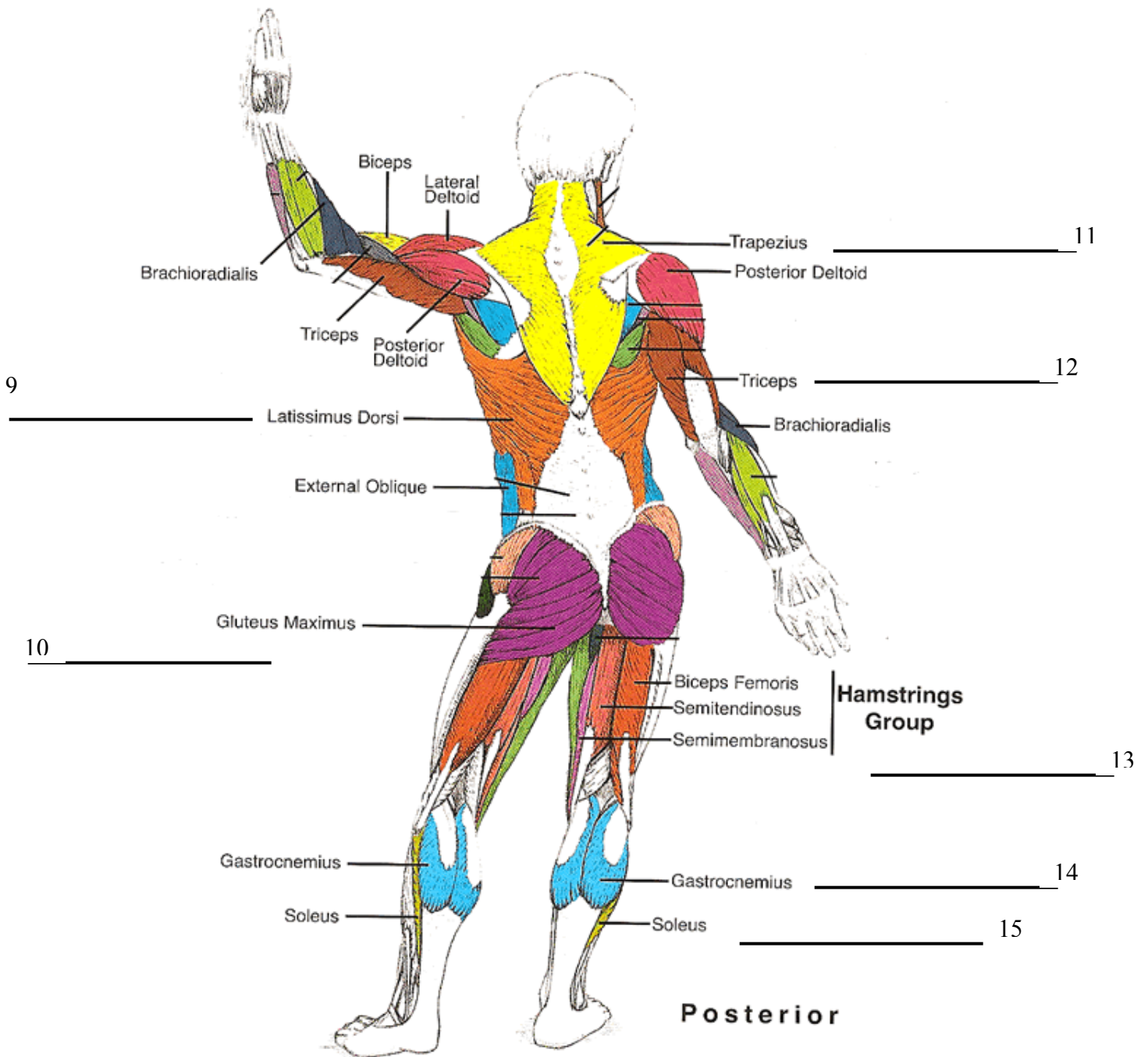
Posterior

NOTE: above diagram from www.pjhspe.com/gragg/posterior_muscles.gif

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Basketball Study Guide

Skills

Dribbling	**Purpose:** To move the ball into position for a pass or a shot
	Key points: • Dribble with _____ • Keep head / eyes up (_____) • Dribble below your _____ • On_____, keep ball near your body and protect with non-dribbling arm • On _____, push ball out and sprint to move down the court
	Rules: • _____: moving with the ball (not including pivoting) while holding the ball • _____: dribbling; stopping your dribble; and dribbling again • _____: palming, carrying the ball by allowing the ball to rest your hands while dribbling
Passing	**Purpose:** To move the ball down the court (faster than a dribble) To move the ball to an open teammate
	Key points: • _____into pass • On_____- - - ball should contact the ground 2/3rd to 3/4th of the way towards your target • On _____- - - aim for your teammate's chest • On a chest pass --- start with your thumbs up and step into the pass while rotating thumbs down to create _____. • Use_____, trickery, when passing • Be quick
	Rules: <u>Traveling</u> (see above)

Shooting	**Purpose: To score**
	Key points: • _____to the basket • Keep your _____on the target • Place feet _____apart with knees bent • If shooting right handed, the _____ foot is slightly forward • If shooting left handed, the _____ foot is slightly forward • Use dominant hand to shoot; non dominant hand to _____ball • Shooting elbow should form a "C" (_____) • Shooting elbow should be lined up with the _____ • Ball should rest on_____, not the palm • Lift up with entire body; shooting arm reaching high on follow through • Follow through high and snap your wrist to create _____
	Rules: • _____: stepping on the free throw line or into the free throw zone in the act of shooting a free throw • _____: making illegal body contact with a player on the opposing team in the act of shooting
Lay-ups	**Purpose: To score on a drive to the basket**
	Key points: • Approach the basket at a _____angle • Take off on the _____leg into a _____ jump • Pretend a "string" attaches your shooting elbow to your outside knee to achieve maximum lift • Aim for the _____corner of the rectangle on the backboard • On the right side, dribble and shoot with your _____ hand • On the left side, dribble and shoot with your _____hand
	Rules: Traveling (see above)

Defense	**Purpose: To prevent the offense from scoring**
	Terms: _____: **When the player with the ball still has the option to dribble . . . . defender should maintain distance of arm's length (or greater if guarding a fast player)** _____: **When the player with the ball does NOT have the option to dribble . . . . defender should move in close to the ball to deflect pass or shot**
	Key points: • **Bend at the knees and stay** _____ • **Maintain position between the offensive player and the** _____ • **Move laterally (side to side) by** _____**feet** • **Use** _____**to interfere with the ball**
	Rules: **Personal foul – illegal contact with opponent (Blocking, Holding, Hacking, Reaching).**
Screen & Roll	**Purpose: Offensive move to free a teammate from the defense**
	Key points: • **Use a** _____ **to set the screen** • **Keep** _____**firmly planted and** _____**slightly bent** • **Position the screen so that the screener's body will block the defender** • **When rolling,** _____**so that you are** _____**the ball** • **Screens can be set _____Ball and _____Ball**
	Rules: **Personal foul:** _____**screen, illegally moving to maintain a screen after setting the screen**

Racket #_____

BADMINTON STUDY GUIDE

THE GAME

Badminton is a game (singles, doubles, mixed doubles) played over a net using racquets and shuttles with strokes that vary from relatively slow to quick and deceptive. It is considered to be the fastest court game in the world.

THE COURT

The court is divided in half by a net. Each half court is divided into _____ and _____ service courts. Service lines and sidelines for both singles and doubles serving are laid out. Sidelines and baselines are also marked for singles and doubles. A singles court measures 44' X 17' and a doubles court measures 44' X 20'.

BADMINTON COURT DIAGRAM

Label each line on a badminton court.
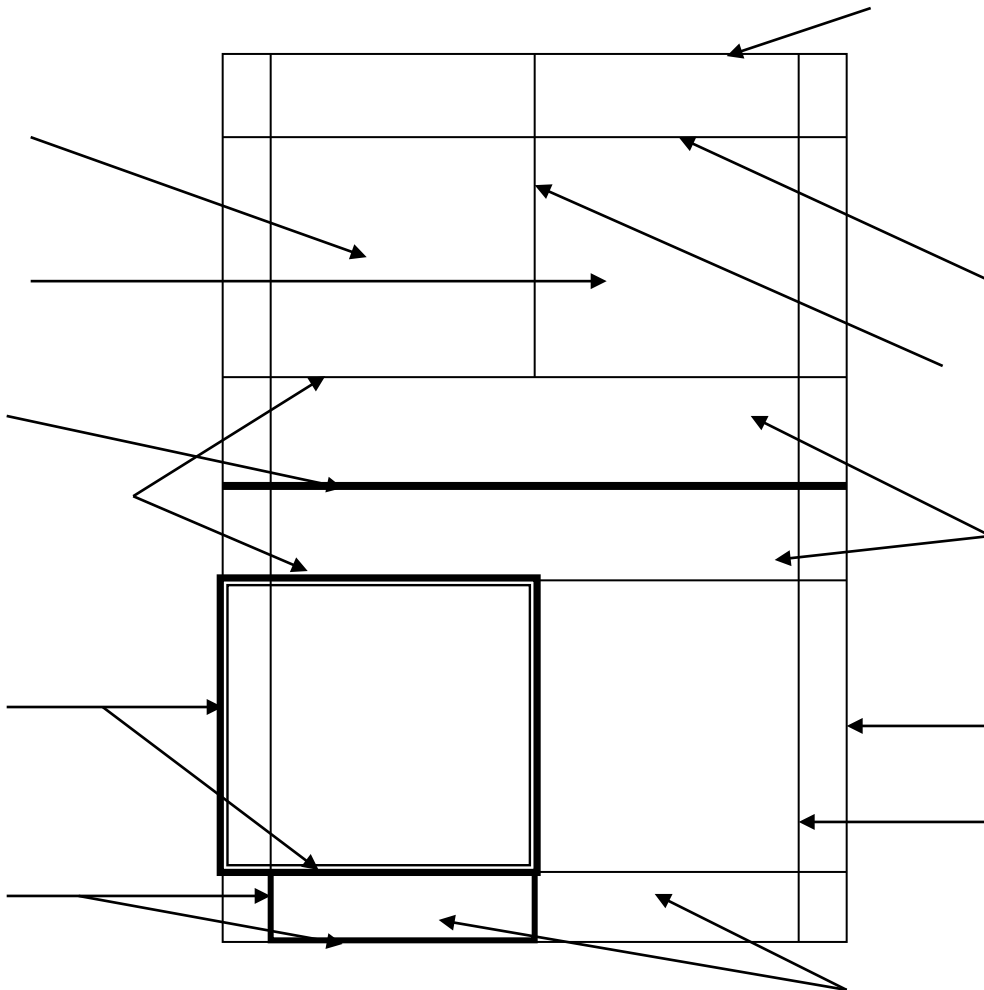
RALLY SCORING

- Singles, doubles and mixed doubles are played to _____ points.
- The team that wins the _____ scores a point. (Every time the shuttle hits the floor a team scores)
- You must be ahead by _____ points to win.
- If the score reaches _____, the first team to score _____ points wins the game.
- A match is the best _____ out of _____ games.

DOUBLES SERVING with RALLY SCORING

- The score must always be announced _____ serving. Say server's score _____.
- Only _____ team member gets to serve before the shuttle is turned over to the _____ team.
- Begin the game by serving from the _____ service court. The score is _____.
- _____ is an even number in Badminton.
- Server and partner switch (_____) service courts when they _____ the rally.
- Only the _____ rotates courts when they win a _____.
- A server will continue to serve until the serving team _____ the rally.
- Your team's score is _____ (0,2,4,6,8 etc.) when serving from the _____ service court.
- Your team's score is _____ (1,3,5,7,9 etc.) when serving from the _____ service court.
- An _____ serve results in the loss of the serve (_____) and the _____ team scores a _____.
- Server is only allowed _____ service attempt(s) unless he/she has a Let (do-over)
- A _____ is a point that is replayed.
- Lets occur if there is outside interference or both the server and receiver _____ the serving rules at the _____ time.

SERVICE FAULTS

- **Line violation (_____)**

- **When serving, not hitting shuttle _____ and below the _____**

- **Not serving _____ across to opponent in proper service court (lines are _____!)**

- **Serves cannot land in the NEUTRAL zone. After the serve (when rallying), the shuttle can land in the NEUTRAL zone.**

- **Not keeping both _____ in contact with ground until shuttle is _____**

- **Making _____ with the shuttle more than _____**

- **Stopping in _____ (feinting)**

- **Not stating the _____ before serving**

POINTS

Either team wins the rally (a point) if their opponents:

- **Fail to _____ a legal serve**

- **Hit the shuttle _____ the boundary lines**

- **Hit the shuttle _____**

- **Hit the shuttle _____ or more times on a return (double hit)**

- **Touch the net with _____**

- **Let the shuttle hit the _____ within legal boundaries**

- **Deliberately "_____" or "_____" the shuttle on the racquet**

- **Do anything to interfere with opponents' _____ hit**

- **Go _____ the net with _____**

- **Reaches _____ the net to return a _____ (racquet follow through is okay)**

- **_____ the shuttle with anything other than the _____**

- **Fail to keep both _____ in contact with the floor until the serve is _____**

GAME STRATEGY

- Vary your _____ (short, long, forehand, backhand)

- Place your _____, hit to your opponents' _____

- Aim for _____ and _____

- _____ your shots (clears, dropshots, drives, smashes)

- Base your return shot on your opponents' _____

- Move your _____

- _____of the game place your _____in the _____ service court IF you are the SERVING team

- _____of the game place your _____in the _____ service court IF you are the RECEIVING team

- Confuse your opponents by _____ for the _____

- Bring the shuttle _____ as quickly as possible

RACKET POSITIONS:

Open Racket: Racket face is angled towards the _____. The shuttle will travel _____.

Closed Racket: Racket face is angled toward the _____. The shuttle will travel _____.
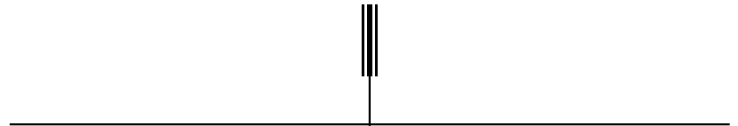
Square Racket: Racket face is perpendicular with the _____ The shuttle will travel _____ to the floor and in a straight line.

DIAGRAMS OF SERVES:

Short Serve
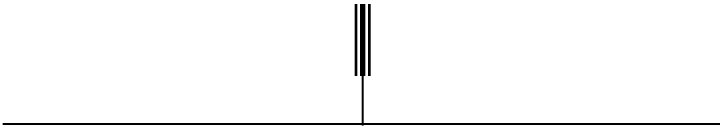
- **Stand near the _____ service line**
- **Can be hit forehand or backhand**
- **Gently push shuttle and use little _____-_____**
- **Bird is hit _____ and close to your opponent's short service line**
- **Used to force your opponent closer to the _____**
- **Used to force your opponent to return the shuttle _____ with an underhand hit.**

Long Serve

- **Stand near the _____ service line**
- **Use forehand and a staggered _____**
- **_____ your weight from your back foot to your front foot**
- **Snap wrist and follow-through above your waist**
- **Contact shuttle with an _____ racket**
- **Shuttle is hit _____ and _____ into your opponent's service court**

DIAGRAMS OF SHOTS:

Clear

- **High deep _____ shot**
- **_____ or overhead**
- **Forehand or backhand**
- **Use an _____ racket**
- **Turn non-racket shoulder to the _____**
- **Used to force your opponents to _____**
- **Used to give yourself time to get in position**

Smash

- Fast, "kill" shot
- Make contact overhead with a _____ racket
- Turn _____ shoulder to the net (forehand smash)
- Bend elbow and lock your wrist, preparing to swing forward
- Transfer _____ from back foot to front foot
- Contact shuttle as _____ as possible and slightly in front of racket shoulder (1 p.m.)
- Can be hit forehand or backhand

Drop shot

- Overhead shot hit _____ and close to the net
- Make contact _____ with a square to slightly closed racket
- Turn non-racket shoulder to the net
- Contact shuttle slightly in front of _____ shoulder
- Minimal follow-through
- Used to pull your opponent out of position and to make them move toward the net
- Forces your opponents to return the shuttle with an _____ hit

Net shot

- _____ shot hit near the net
- Forehand or backhand shot
- Contact shuttle near the net with an _____ racket
- Push shuttle _____ and just over the net
- Forces your opponents to move toward the _____
- Forces your opponents to return the shuttle with an _____ hit

Drive

- Low, fast, parallel to the ground shot
- Contact shuttle about shoulder high with a _____ racket
- Used mostly in _____
- Usually hit from your mid-court to your opponent's backcourt
- Used to make your opponents _____
- Can be hit forehand or backhand

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9/10 PHYSICAL EDUCATION BOWLING STUDY GUIDE

OBJECTIVE

- The objective in bowling is to knock down as many pins as possible in a game.

SCORING

- It is possible to knock down **10** pins in a frame.
- There are **10** frames in a game.
- The total points possible in a frame are **30** and in a game are **300**.
- You roll the ball twice in frames 1 to 9 to knock down ten pins and up to three times in frame 10.
- If you roll a strike or spare in the 10th frame you are allowed to roll a third ball.
- When the first ball in any frame knocks down all the pins, it is a **strike (X)**.
- If all the pins in a frame are knocked down in two rolls, it is a **spare (/)**.
- If pin(s) in a frame are left standing after the second roll, it is a **miss (-)**.

ETIQUETTE

- If two bowlers in adjacent lanes are ready to bowl at the same time, the bowler on the **right** bowls **first.**
- Stay on your own approach at all times.
- Do not take food or drink to the bowling area.
- Be ready to bowl when it is your turn.
- Do not roll a second ball if the first ball is not returned.

THE FOUR STEP APPROACH

- Left handers begin on **left** foot.
- Right handers begin on **right** foot.
- **Slide** on the last step to **set** the ball down on the lane.

THE PERFECT STRIKE

- The **strike pocket** for left handers is between the **1-2 pins**.
  - The ball should physically hit pins 1,2,5,8.
  - Other pins (**pin deflection**) should knock down pins 3,4,6,7,9,10.
- The **strike pocket** for right handers is between the **1-3 pins**.
  - The ball should physically hit pins 1,3,5,9.
  - Other pins (**pin deflection**) should knock down pins 2,4,6,7,8,10.

EXHIBIT 3-1
Ball and Pin
Deflection on a Perfect Strike Hit
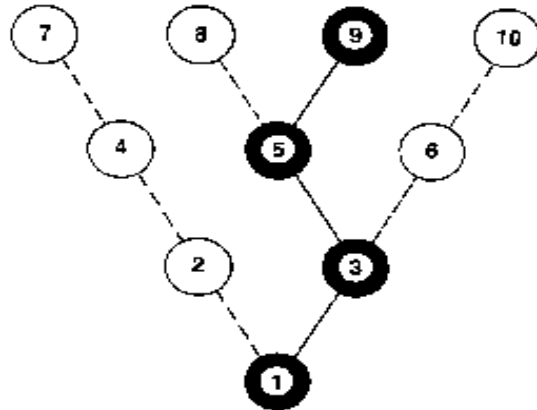
The *Right* Handed Bowler Covers the 1-3-5 and 9-pins with the Ball. The other six pins must be taken out by pin deflection. The 1-pin sends the 2 into the 4 and into the 7-pin. The 5-pin takes out the 8-pin. The 3-pin sends the 6-pin into the 10-pin.
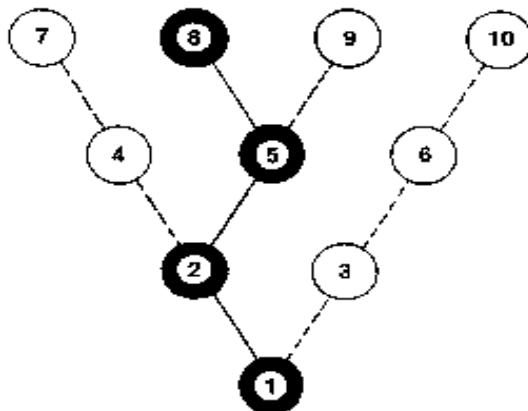
The *Left* Handed Bowler Covers the 1-2-5 and 8-pins with the Ball. The other six pins must be taken out by pin deflection. The 1-pin sends the 3 into the 6 and into the 10-pin. The 5-pin takes out the 9-pin. The 2-pin sends the 4-pin into the 7-pin.

RH-74

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THE LANE

- There are 39 boards on a lane. Every 5th board is marked so bowlers know where to begin their approach to pick up different targets.
- **Arrows** are printed on the lane to help bowlers line up their approach with their target.

FACTORS THAT INFLUENCE STRIKES

- The **approach** (mechanics and position on lane)
- Ball **spin**
- Ball **speed**
- **Accuracy** (aiming for specific targets is the most important factor)
- Ball **weight**

SPLITS

- A split occurs when a combination of pins is left standing after the first roll in a frame and there is a pin missing immediately ahead of or beside a standing pin.
    - A **split** is a **(S)**.
    - It is not a split if the 1-pin is left standing.

GOOD STRATEGY

- Use a **hook ball** (side spin) for **strikes**.
    - Hook balls thrown with the left hand hook right.
    - Hook balls thrown with the right hand hook left.
    - Hook balls cover more territory in the pin deck.
- Pick up **spares** with a diagonal **straight ball**.
    - Straight balls are more accurate than hook balls.
- Do not hit the 1 pin head-on (often results in a split.)
- Accuracy is more important than speed.
- Do not loft the ball; set it down on the lane.
- Square your shoulders to look directly at the pins.
- To improve accuracy, aim for the arrows as well as the pins.
- Keep your back straight and slide to set the ball down
- Pretend you are throwing a suitcase.
- "Shake" hands as you release the ball and follow through by bringing your hand up to your ear.

STRIKE POCKET
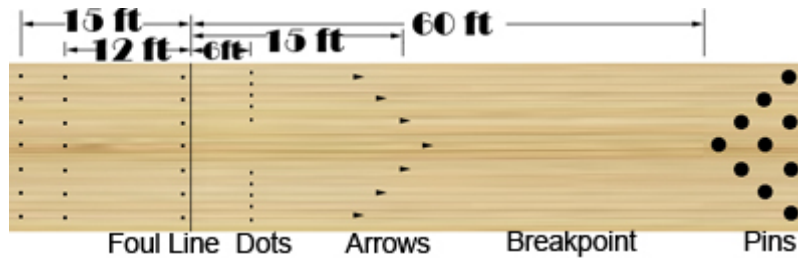
Diagram a diagonal STRAIGHT ball into the 1-2 pocket for a LEFT handed bowler
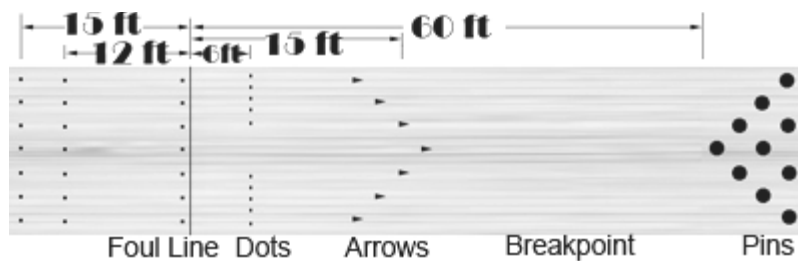
Diagram a diagonal STRAIGHT ball into the 1-3 pocket for a RIGHT handed bowler
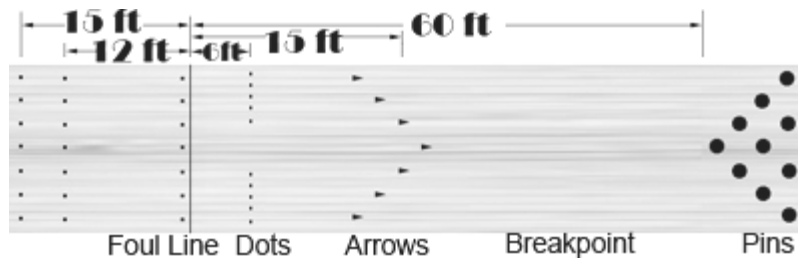
Diagram a HOOK ball into the 1-2 pocket for a LEFT handed bowler
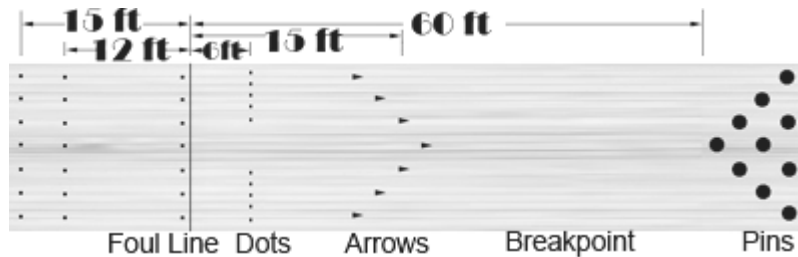
Diagram a HOOK ball into the 1-3 pocket for a RIGHT handed bowler

NOTE: above diagram from http://helpwithbowling.com/images/bowling-lane-diagram.jpg

PICKING UP SPARES
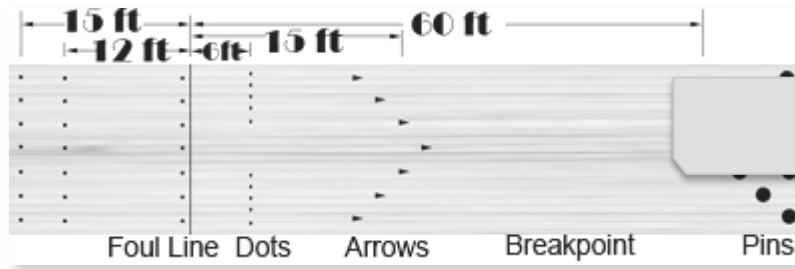
Diagram a diagonal straight ball from left to right to pick up right side spares
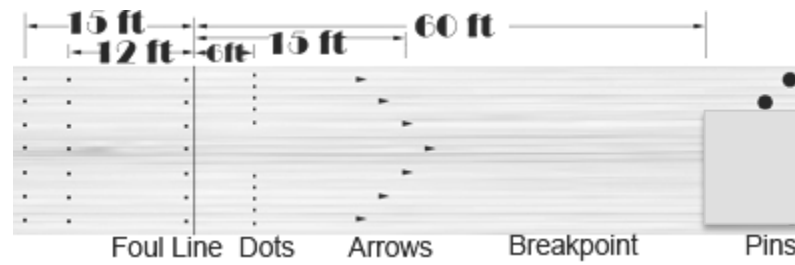
Diagram a diagonal straight ball from right to left to pick up left side spares

HOW TO SCORE

When the first ball in any frame knocks down all the pins, it is a **STRIKE** and is marked with _____.
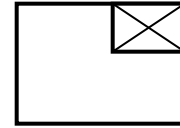
If all the pins in a frame are knocked down in two rolls, it is a **SPARE** and is marked with a _____.
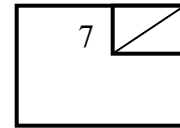
If you miss the standing pins on the second roll in a frame, it is a **MISS** and it is marked with a _____.
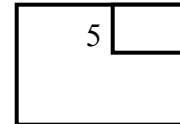
If a **SPLIT** is left after the first roll in a frame, It is marked with a _____.
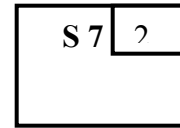
- If you roll a strike, you will receive ten pins, plus what you knock down on the **next two rolls** as a "bonus" in that frame.

- If you earn a spare, you will receive ten pins, plus what you knock down on the **next roll** as a "bonus" in that frame.

- If you fail to knock down all ten pins with both rolls, you record the number of pins you did knock down as your score in that particular frame.

HOW TO FIGURE OUT YOUR AVERAGE

Individual average:

TOTAL # PINS KNOCKED DOWN
TOTAL # GAMES PLAYED

Example:

$$\frac{5394}{29} = 186 \text{ is average}$$

HOW TO FIGURE OUT INDIVIDUAL HANDICAP

Individual team handicap formula:

(200 – Average) x .80 = individual handicap

Example:

(200 – 189) x .80

11 x .80 = 8.8 or 9

HOW TO FIGURE OUT TEAM HANDICAP

Team handicap formula:

Player 1 handicap + Player 2 handicap + Player 3 handicap + Player 4 handicap = Team handicap

Example:

Player 1	88
Player 2	75
Player 3	49
Player 4	73
Team Handicap	285

LACROSSE
WHS Physical Education Rules

I. History of Lacrosse

       Lacrosse is steeped in tradition, and though today's participants use sticks of plastic and titanium rather than wood, the Lacrosse stick symbolizes the historical significance of the game. North American Indians developed the game as early as the 15th century.

       Indians played the game not only for recreation, but also to settle tribal disputes and to toughen warriors for fighting. The winner of the game won the conflict. There were no limits on how many players one team could have; games were played by as many as 1,000 men. Play could last many days, beginning at sunup and ending at sundown each day. Goals, consisting of rocks or trees, were generally 500 yards to a half-mile apart, but could be several miles apart. There were no sidelines.

       When Europeans, specifically, the Jesuit missionaries from France, first saw the game in the 17th century, they wrote about a game played by the Huron Indians with sticks reminiscent of the crosier (la Crosse) carried by bishops as a symbol of their office.

       In the 1800's white settlers in Montreal took up the game. When the Dominion of Canada was created a decade later, Lacrosse was designated – and still remains – the national sport. Canadians introduced the game to the United States, England, Ireland, and Scotland. Today, Lacrosse is played at international competition by England and Australia, as well as the United States and Canada.

II. Lacrosse Skills

1. _____: Using the stick to pick up the ball from the ground and gain control of it.

2. _____: Coordinated "rocking" motion using arms and wrists. A player maintains control of the ball in the net of his stick, even while running, turning, and stopping.

3. _____: With a quick wrist action and an overhead swing of the arms, a player can pass the ball to a teammate.

4. _____: The Lacrosse stick is used to catch the ball in mid-flight. When the ball arrives, give a little to take some of the speed off of the ball and prevent it from bouncing out.

5. _____: The act of throwing the ball with the crosse at the goal in an attempt to score. An effective shot on goal is the "bounce shot" that ricochets off the ground.

6. _____: A movement by an offensive player without the ball, towards the opponent's goal, in anticipation of a pass and shot.

III. Lacrosse Rules

1. Begin the game with a free pass from the _____. The ball must be passed to put it in play. After a <u>goal</u>, begin play with a free pass from the centerline.

2. On a free pass the opposing team must be at least _____ away. You may not _____ on a free pass.

3. Play the ball, not the opponent. (No crosse (stick) or body contact allowed) Although permitted in the official game, body and stick checking are <u>not</u> allowed in physical education Lacrosse. <u>PENALTIES</u> FOR CHECKING, SLASHING, TRIPPING, HOLDING, PUSHING, ROUGH PLAY, may include removal from the game.

4. Do not bat or _____ the ball. Gain possession, then pass or shoot.

5. _____ the ball when it is on the ground. Do NOT cover or trap the ball with the lacrosse basket.

6. You have _____ seconds to shoot or pass the ball (no hand-offs). When a player has possession of the ball the opponents may not take or jar the ball free.

7. Players must keep _____ hands on their sticks.

8. The ball must be passed over (not carried over) the _____.

9. Play should be _____ (no stalling).

10. No one is allowed in the _____. If the ball stops in the crease, the _____ team will retrieve the ball and get a free pass from outside the crease.

11. Player-on-player defense only. Double/triple teaming is _____allowed.

12. _____ -- Attackers must be on the offensive half of the field and the defenders must stay in the defensive half at all times. This helps prevent all players in the same area.

<u>A VIOLATION OF THE ABOVE RULES WILL LEAD TO A CHANGE OF POSSESSION</u> (exception: Rule #2)

IV. Lacrosse Field Positions:

1. _____: Players whose primary purpose is to score. Attackers must stay on the offensive half of the field.

2. _____: Players who are responsible for defending the goal, stealing possession from their opponents, and transferring that possession to their midfielders or attackers. Defenders must remain in the defensive half of the field.

3. _____: Players whose responsibility is to cover the entire field playing both defense and offense. Midfielders must stay out of the crease.

4. _____: The goalie is a defensive player and is the only one allowed in the crease.

V. Lacrosse Field

A Lacrosse field is 110 yards long and 60 yards wide. The goals are 80 yards apart with 15 yards behind each goal. The field is divided in half by a centerline. The _____ is an 18ft. diameter circle drawn around each goal. Only the goalie can be in the crease.

Label the field diagram below. Include: Sideline
                                              Endline
                                              Centerline
                                              Crease
                                              Goal
                                              Offensive half
                                              Defensive half
                                              Attackers (A)
                                              Midfielders (M)
                                              Defenders (D)
                                              Goalie (G)
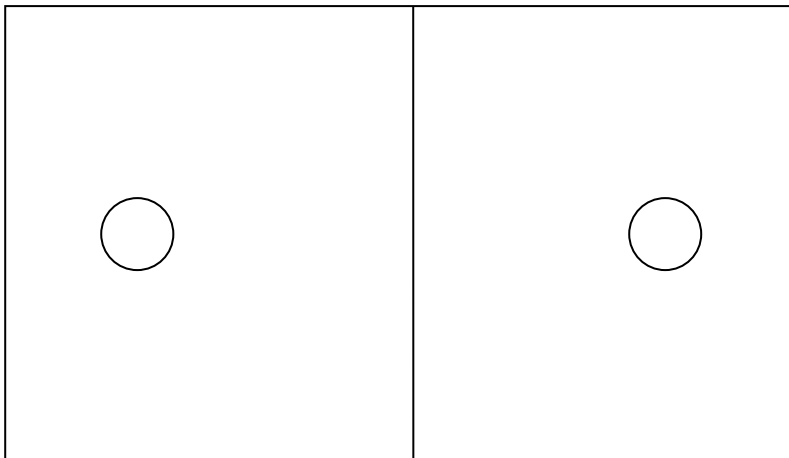
Paddle #_____

TABLE TENNIS STUDY GUIDE

To Start a Game (Singles and Doubles)

One player hides the ball in one hand under the table. The other player tries to guess which hand holds the ball. The winner gets the choice of serving or receiving the ball or the choice of side.

Game Play (Singles and Doubles)

- Lines and edges are legal territory
- Sides are not legal territory
- The ball must bounce once on each side of the table (no volleying)
- You may not move or touch the table with your non-playing hand
- All hits are alternated (hit the ball and get out of the way if you are playing doubles)
- Double hits are illegal
- The ball does not have to go over the net to be legal
- Balls that touch the top of the net or climb the net and land in the opponent's court are legal during game play
- In doubles, you will always receive the ball from the same player and hit the ball to the same player

The Grip

- The paddle face is red on one side, black on the other side
- The _____ side should be to your _____.
- The _____ side should be to your _____.
- Grip the racket so the lowest portion of the paddle face is between your _____ and _____
- The remaining _____ fingers grip the _____.
- Do not touch the rubber surfaces of the paddle because

  _____

  _____.

Body Position

- Your feet are _____ apart.
- _____ at the waist
- Be able to easily touch the _____ with your paddle near the

  _____

Footwork

- Move _____ or _____ to
  _____
- Take _____ steps
- When playing doubles, _____after hitting the ball
- To move left, lead with the _____foot
- To move right, lead with the _____foot

Scoring

- The _____ team and the _____ team can score a point
- Table Tennis is played to _____ points but you must win by _____ points

Serving Mechanics

- The ball must be tossed at least _____inches into the air from an _____palm
- Ball contact must be made _____ the end of the table
- Ball contact must be made _____ the _____

Service Rules (For Doubles)

- All serves are from the _____to the _____
- Each player will serve _____in a row
- In doubles, immediately _____ after the 2nd serve is played out.
- The ball is served in a _____ direction
- Balls that land on the _____ are good
- If the score is 10 to 10 _____after each point
- _____ serves are serves that touch the net and land in the correct service court.
- Let serves _____over.
- The ball must _____once on the server side before going over the net
- State the server's score _____ and the receiver's score _____.

Service Rules (For Singles)

- Serving in Singles is the same as serving in Doubles **EXCEPT**, in Singles; the serve does NOT have to be from the right side to the right side. The serve can be to _____ side of the table (right or left).

Racket Position

- An open face racket is turned _____
- A closed face racket is turned _____

Serving with spin

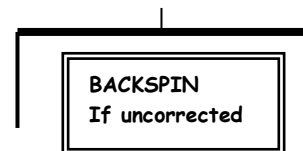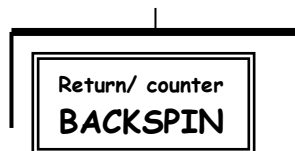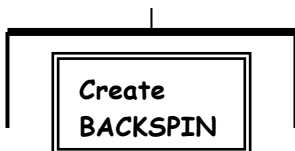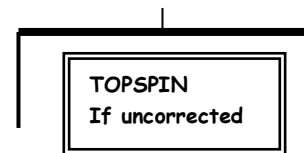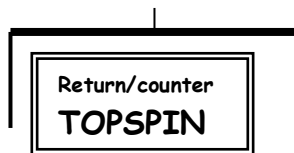Forehand, backhand serve with topspin
- Create topspin on the forehand and backhand serve by _____ the paddle against the ball in an _____motion.

- The stroke begins with the paddle held _____and ends with the paddle held _____ with a _____ face.
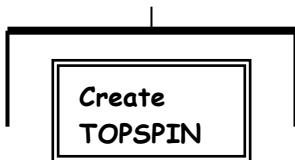
Forehand, backhand serve with backspin
- Create backspin on the forehand and backhand serve by _____the paddle against the ball in a _____motion.

- The stroke begins with the paddle held _____ and ends with the paddle held _____with an _____face.

Spin

- The paddle must _____ against the ball to create _____.
- Use the wrist to control _____ and _____
- **Topspin** causes the ball to _____. If returned with an uncorrected racket, the ball will _____ and fly off the table.
- **Backspin** causes the ball to _____. If returned with an uncorrected racket, the ball will go into _____.
- Sidespin causes the ball to _____

Create TOPSPIN	Return/counter TOPSPIN	TOPSPIN If uncorrected
Create BACKSPIN	Return/ counter BACKSPIN	BACKSPIN If uncorrected

To Return Spin

- To return backspin use a slightly _____ face racket
- To return topspin use a _____ face racket
- To return side spin hit the ball to the _____ of the table

Strokes

- Strokes are defined as _____
- The two types of strokes are _____ strokes and _____ strokes
- Offensive strokes are used to _____
- Defensive strokes are used to _____
  _____

Offensive strokes

Forehand topspin
- After the bounce, brush the ball _____ with your paddle in a _____ position to create topspin.
- Your _____ is close to your side.
- Start with your paddle _____ and finish the stroke high like a _____.
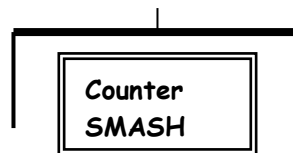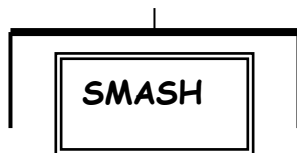
Backhand topspin
- After the bounce, brush the ball _____ with your paddle in a _____ position to create backspin.
- Your _____ is close to your side.
- Start with your paddle _____ and finish the stroke high.
- The wrist is used to _____.

Smash
- The smash is used for maximum _____ to put away the point.
- Hit the ball after the bounce _____.
- Keep your _____ close to your body.
- For maximum speed, _____ your body.

```
SMASH
```

```
Counter
SMASH
```

Defensive strokes

Push

- The _____ is a short, defensive stroke used when player is close to table
- It is designed to keep _____
- Hit the ball when it is on the _____
- Keep your _____ close to your body
- The paddle should be in the _____ face position to put _____ on the ball

```
PUSH
```
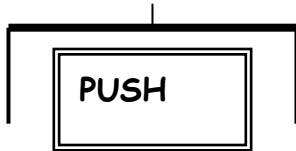
Chop

- The _____ is a long, defensive stroke used when player is back from the table.
- It is designed to put _____
- Hit the ball when it is on the _____
- Start the motion of the stroke with the racket held _____ and _____ by your body.
- Finish the stroke with the racket _____ and _____ of your body

```
CHOP
```
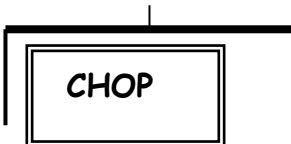
Block

- The _____ is a short, defensive stroke
- It is designed to _____
- Hit the ball when it is on the _____
- If the ball hit by your opponent is traveling fast, think of the block as a

  _____

```
BLOCK
```
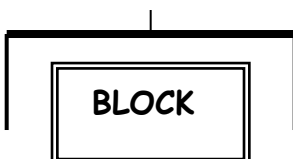
VOLLEYBALL STUDY GUIDE

Volleyball skills, key concepts, and terminology:

Set	Bump	Underhand pass	Spike	Dig
Hit	Forearm pass	Overhead pass	Block	Fencer stance
Approach	Floater	Forearm platform	Serve	Shoulder shrug
Defense	Stay low	Thumbs together	Offense	High Elbow

Match the above skills, key concepts, and terminology with the following diagrams.   Add your own key concepts or coaching cues. When and why are the different volleyball skills used?

Skill: ___Foream Pass , "BUMP"_____

Key Points:
1.
2.
3.

4.

Coaching Cues:
*

*
*
*
*

Notes: "Dig" is a

Skill ___Setting / Overhead Pass___

Key Points:

1.
2.
3.

Coaching Cue:

*

Note: sets are

Skill _HITTING / SPIKE   (Kill)_(Attack)

Key Points:

1.
2.
3.

4.

Coaching Cues:

*
*

Skill _____Serve (Floater)_____

Key Points:
1.
2.
3.
4.

Coaching cues:
*

*

*

Skill Blocking_____

Key Points:
1.
2.
3.

Coaching cues:
Stance: *

*

*

*

THE GAME

Volleyball is a <u>six</u> (6) person team sport played on a <u>court</u> (30'X60') divided by a <u>net</u> (7'4" in height for girls and 8' for boys). Each team tries to cause the opposing team to be <u>unable to return</u> the ball over the net.

RALLY SCORING

Both the SERVING team and the RECEIVING team can score a point. A team must have <u>25 points</u> and be at least <u>2</u> points ahead of their opponents to win the game.

SERVICE

The game begins by a <u>serve</u> (service) taken behind the baseline. The server may not step on or over the baseline (foot fault) until the ball is hit. A served ball that hits the net and lands in the opposing team's court is legal.

THE RULES

- All players must rotate one position in a clockwise direction before their team receives the serve
- All players must maintain their position until the ball is served
- Back row players can only spike (attack) from behind the 10 foot line
- Back row players can not block the ball
- Each side is allowed three clean hits (blocks do not count as a hit)
- A player can not hit the ball twice in succession
- "Liners" are considered within bounds
- It is illegal for a player to touch the net
- It is illegal to step over the center line
- It is illegal to block a serve
- Follow through is legal on a hit as long as the hitter does not touch the net

GOOD TEAM STRATEGY

- Spread your best players throughout the lineup
- Aim for lines and corners when serving and during game play
- Look for holes in the opposing team lineup
- If possible, the back row should receive the serve
- The back row receiver should direct the ball to the right front area of the court for the "set"
- Slow down a fast ball by slightly relaxing the arm platform on contact
- Speed up a slow ball by assuming a more rigid platform with the arms
- Angle the arm platform 45 degrees to send the ball forward
- Angle the platform 90 degrees to allow a nearby teammate to get under the ball
- Use good teamwork (3 hits) to set up your attack and improve your chances of scoring

THE COURT   ROTATION
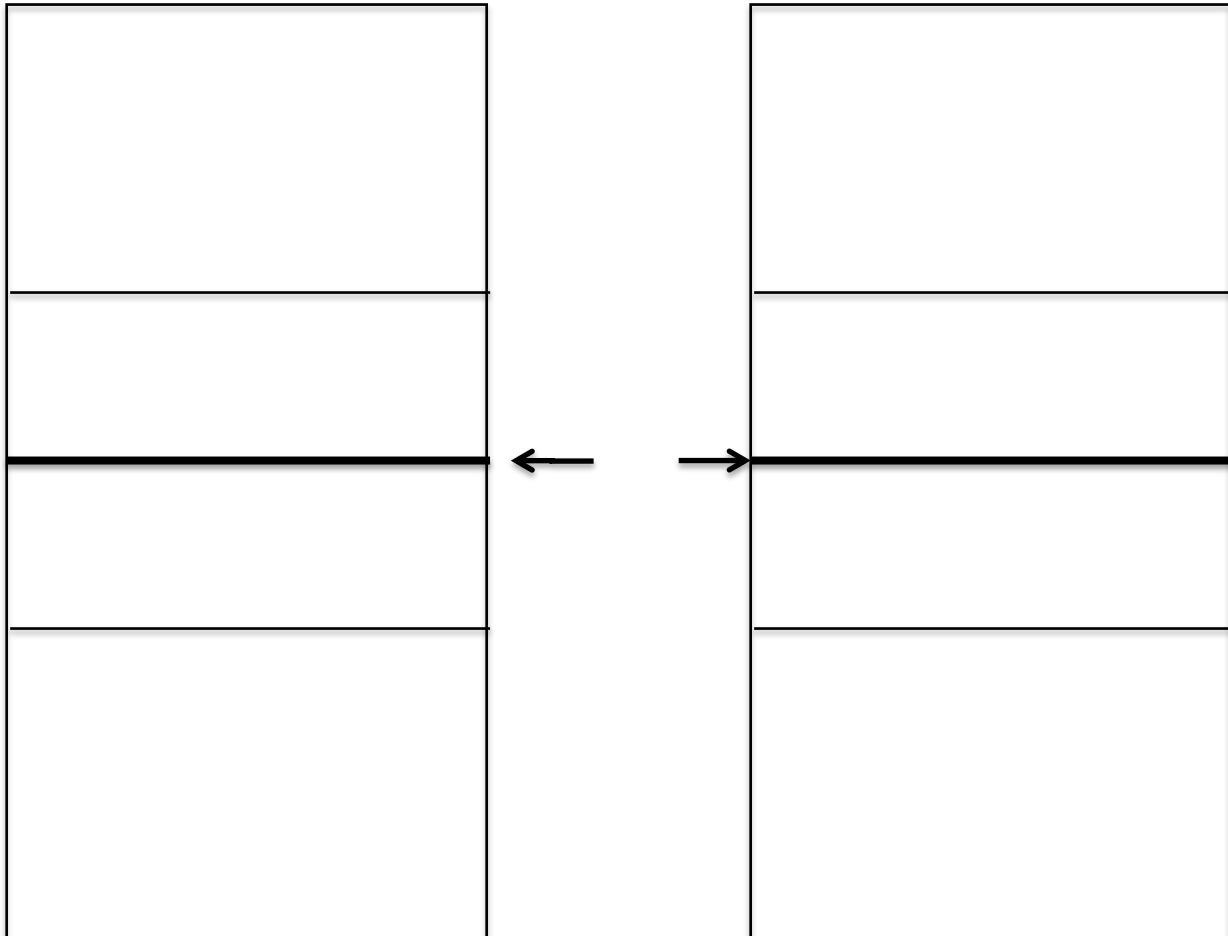
Paddle #

_____

PICKLEBALL STUDY GUIDE

Description

Pickleball is a net game that is played on a badminton court. Two (singles) or four (doubles) people can play.

Etiquette/Court manners

- If there is a disagreement about whether the ball was clearly in or out, _____ _____.
- Throwing equipment in anger is unsportsmanlike conduct. Control your temper.
- Give your opponent time to get _____ **before** serving the ball.
- Return stray balls to other courts, but not while a point is being played.
- Do not walk through other people's courts at any time.
- Know the rules of the game and observe them.

Game Play

- Rally the ball to determine _____ or _____.
- Net balls that land on the opposing team's court during a rally are _____.
- Lines are _____.

The Court: in the space below, label the pickleball court diagram. Include line names, the non-volley zone, and the service areas.
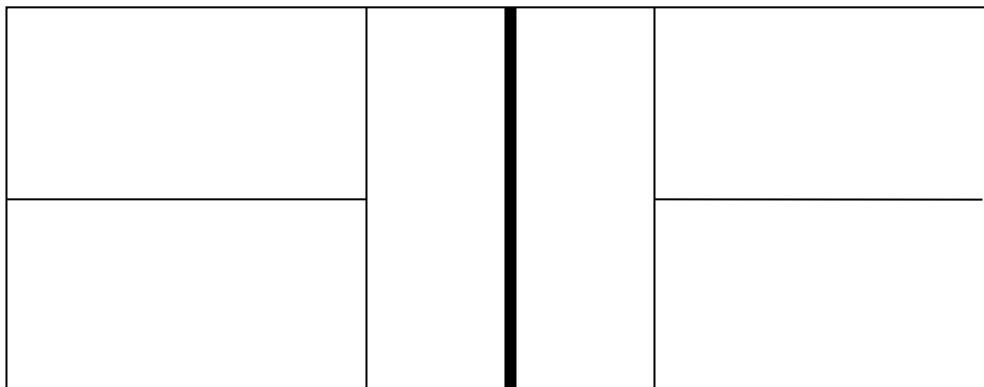
The Serve

- At the start of a game, the player in the right service court always serves _____.
- Server must keep _____ behind the yellow baseline.
- Server must announce the score saying his/ her team's score first.
- The serve is an _____.
- Server _____ with his/her partner every time they _____.
- Server must contact the ball in the air; it _____ bounce.
- The serve is made _____ and should land between the non-volley line and the _____. Lines are legal.
- The only time a serve is taken over (a _____) is when the ball hits the net and lands in the diagonal service court.
- The server shall continue to serve until his/her team makes a fault.

DOUBLES SERVING with RALLY SCORING

- Pickleball is played to _____ points but a team must win by _____ points.
- The score must always be announced _____ serving. Say server's score _____.
- Begin the game by serving from the _____ service court. The score is _____.
- _____ is an even number in Pickleball.
- Server and partner switch (_____) service courts when they _____ the rally.
- Only the _____ team rotates courts when they score a rally/point.
- A server will continue to serve until the serving team _____ the rally.
- Your team's score is _____ **(0,2,4,6,8** etc.) when serving from the _____ service court.
- Your team's score is _____ **(1,3,5,7,9** etc.) when serving from the _____ service court.
- An _____ serve results in the loss of the serve (side out) and the _____ team scores a _____.

- Server is only allowed <u>one</u> service attempt unless he/she has a

  1. **Let** - the point is replayed because of outside interference or the ball _____ the net and lands in the _____ service court

  2. **Let** - both server and receiver _____ the serving rules at the _____ time

Double Bounce Rule

Describe the double bounce rule:
Each team must play their first shot off the bounce. The receiving team must let the serve bounce and the serving team must let the return of serve bounce before volleying it.

Faults

It is a fault when:

- The ball is hit out of bounds.
- The ball does not clear the _____.
- A player steps on to the non-volley line or into the non-volley zone and _____ the ball (including on follow through.)
- A player _____ the ball before the ball has bounced once on each side of the court (Double Bounce Rule).
- A receiving player volleys the serve.
- A player touches the _____ with a paddle or any part of the body.
- An illegal player receives the _____.

Serving Faults

It is a serving fault if:

- The server does not state the score _____ serving the ball.
- The server does not keep _____ behind the baseline while serving.
- The server swings and_____
- The server does not serve_____ .
- The server serves from the incorrect service court.
- The serve does not clear the _____.
- The serve does not land in the correct diagonal service court (lines are good).

Doubles Strategies

- The team that has control of _____ will, in most instances, win the rally.
- The serve, the drive, and the smash are the major _____strokes.
- If you are pulled out of position by a ball, use an _____ to give yourself time to get back into position.
- If both defensive players are at the net, hit _____ over their heads or _____down the middle of the court.
- If both defensive players are in the backcourt hit a _____ shot or deep _____ shots; then charge to the volley position.
- If one defensive player is at the net and one is playing deep hit a _____ shot to the deep player or a _____ shot to the open part of the court.
- Aim for _____ and your opponent's backhand.
- The strongest server's home service court should be the _____ service court if your team serves first.

Vocabulary

Backhand Stroke with the back of the hand facing the direction of movement

Baseline   The backcourt boundary line

Drive A hard sidearm shot with a straight ball path

Drop shot   A softly hit underhand ball that just clears the net and drops, usually hit with a chopping motion

Fault   An error in the service attempt, or an improperly hit ball

Foot fault Caused by the server stepping over the baseline with both feet before serving

Forehand   Stroke with the palm of the hand facing the direction of movement

Ground Strokes   Strokes made after the ball has bounced (forehand or backhand)

Let A point replayed with no penalty. Usually caused by outside interference, or, during the serve when the ball touches the top of the net, but is good otherwise

Lob An overhead ball hit high enough in the air to pass over the head of the net player(s)

Non-volley zone An area by the net that cannot be entered unless the ball bounces in it

Rally Scoring Scoring method in which a point is scored by whichever team wins the rally.

Smash A hard overhead stroke with a sharply angled ball path

Volley To hit the ball before it bounces

Diagram of SHOTS:

DROP SHOT

LOB

DRIVE

SMASH

Mile Time Goal: _____

Per lap time needed to reach above goal

_____

NAME _____
Block _____

MILE TIMES

Block _____   Date _____

Name	Lap 1	Lap 2	Lap 3	Lap 4

Splits: _____   _____   _____

Date _____

Name	Lap 1	Lap 2	Lap 3	Lap 4

Splits: _____   _____   _____

Block _____   Date _____

Name	Lap 1	Lap 2	Lap 3	Lap 4

Splits: _____   _____   _____

Date _____

Name	Lap 1	Lap 2	Lap 3	Lap 4

Splits: _____   _____   _____

Mile Time Goal: _____

Per lap time needed to reach above goal

_____

MILE TIMES

Block _____   Date _____

Name	Lap 1	Lap 2	Lap 3	Lap 4

Splits: _____   _____   _____

Date _____

Name	Lap 1	Lap 2	Lap 3	Lap 4

Splits: _____   _____   _____

Block _____   Date _____

Name	Lap 1	Lap 2	Lap 3	Lap 4

Splits: _____   _____   _____

Date _____

Name	Lap 1	Lap 2	Lap 3	Lap 4

Splits: _____   _____   _____

Mile Time Goal: _____

Per lap time needed to reach above goal

_____

NAME _____
Block _____

56

MILE TIMES

Block _____   Date _____

Name	Lap 1	Lap 2	Lap 3	Lap 4

Splits: _____ _____ _____

Block _____   Date _____

Name	Lap 1	Lap 2	Lap 3	Lap 4

Splits: _____ _____ _____

Block _____   Date _____

Name	Lap 1	Lap 2	Lap 3	Lap 4

Splits: _____ _____ _____

Date _____

Block _____

Name	Lap 1	Lap 2	Lap 3	Lap 4

Splits: _____ _____ _____

Mile Time Goal: _____

Per lap time needed to reach above goal

_____

MILE TIMES

Block _____   Date _____

Name	Lap 1	Lap 2	Lap 3	Lap 4

Splits: _____   _____   _____

Date _____

Name	Lap 1	Lap 2	Lap 3	Lap 4

Splits: _____   _____   _____

Block _____   Date _____

Name	Lap 1	Lap 2	Lap 3	Lap 4

Splits: _____   _____   _____

Date _____

Name	Lap 1	Lap 2	Lap 3	Lap 4

Splits: _____   _____   _____

Fitness Testing

A good fitness program will begin with an assessment of your current fitness. Muscular strength, endurance and aerobic exercise are vital to our physical health, and our ability to perform exercise. Over time, you should see gains in strength, endurance and flexibility. A healthy diet (lots of fruits, vegetables and protein), complements your training and should be included to see the greatest gains in overall fitness and physical appearance.

Fitness Test	PRE-TEST (FALL)	GOAL for Spring Fitness Testing	SPRING TEST	Did you meet the HFZ for your age and gender?	Did you meet your GOAL?
Push-ups			Push-ups	Yes No	Yes No
Curl-ups			Curl-ups _____ (Max. score is 75)	Yes No	Yes No
Sit & reach	___ / ___ LF. / RT.	___ / ___ LF. / RT.	Sit & reach ___ / ___ LF. / RT. (Max. score is 12)	Yes No	Yes No
Trunk Lift			Trunk Lift _____ (Max. score is 12)	Yes No	Yes No
Shoulder Stretch	___ / ___ LF. / RT.	Pass / Pass LF. / RT.	Shoulder Stretch ___ / ___ LF. / RT.	Yes No	Yes No
Mile	Time _____ VO2 max _____	Time _____	Mile Time _____ VO2 max _____	Yes No	Yes No
Height/Weight	___ / ___ BMI _____	Optional Weight _____	Ht/Weight ___ / ___ BMI _____	Yes No	Yes No

MILE Fall fitness testing   FALL Test date _____

NAME	1	2	3	4

Mile Time Goal: _____

Per lap time needed to reach the above goal: _____

MILE Spring fitness testing

Test date _____

NAME	1	2	3	4

HFZ Performance Standards (FITNESSGRAM Healthy Fitness Zones)

MALE

AGE	Mile Run VO2 max	Body Mass Index	Curl ups	Trunk Lift	Push Ups	Sit & Reach
13	>41.1	22.2 – 15.8	>21	9 – 12	>12	8
14	>42.5	23.0 – 16.4	>24	9 – 12	>14	8
15	>43.6	23.7 – 16.9	>24	9 – 12	>16	8
16	>44.1	24.5 – 17.5	>24	9 – 12	>18	8
17	>44.2	24.9 – 18.1	>24	9 – 12	>18	8

FEMALE

AGE	Mile Run VO2 max	Body Mass Index	Curl ups	Trunk Lift	Push Ups	Sit & Reach
13	>39.7	22.9 – 15.7	>18	9 – 12	>7	10
14	>39.4	23.6 – 16.2	>18	9 – 12	>7	10
15	>39.1	24.3 – 16.7	>18	9 – 12	>7	12
16	>38.9	24.8 – 17.1	>18	9 – 12	>7	12
17	>38.8	24.9 – 17.5	>18	9 – 12	>7	12

Fitness Testing

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Fitness Test	PRE-TEST (FALL)	GOAL for Spring Fitness Testing	SPRING TEST	Did you meet the HFZ for your age and gender?	Did you meet your GOAL?
Push-ups			Push-ups	Yes No	Yes No
Curl-ups			Curl-ups (Max. score is 75)	Yes No	Yes No
Sit & reach	LF. ___ / ___ RT.	LF. ___ / ___ RT.	Sit & reach ___ LF. / ___ RT. (Max. score is 12)	Yes No	Yes No
Trunk Lift			Trunk Lift (Max. score is 12)	Yes No	Yes No
Shoulder Stretch	LF. ___ / ___ RT.	Pass / Pass LF. ___ / ___ RT.	Shoulder Stretch ___ LF. / ___ RT.	Yes No	Yes No
Mile	Time ___ VO2 max ___	Time ___	Mile Time ___ VO2 max ___	Yes No	Yes No
Height/Weight	___ / ___ BMI ___	Optional Weight ___	Ht/Weight ___ / ___ BMI ___	Yes No	Yes No

MILE Fall fitness testing   FALL Test date _____

NAME	1	2	3	4

Mile Time Goal: _____

Per lap time needed to reach the above goal: _____

MILE Spring fitness testing

Test date _____

NAME	1	2	3	4

HFZ Performance Standards   (FITNESSGRAM Healthy Fitness Zones)

MALE

AGE	Mile Run VO2 max	Body Mass Index	Curl ups	Trunk Lift	Push Ups	Sit & Reach
13	>41.1	22.2 – 15.8	>21	9 - 12	>12	8
14	>42.5	23.0 – 16.4	>24	9 - 12	>14	8
15	>43.6	23.7 – 16.9	>24	9 - 12	>16	8
16	>44.1	24.5 – 17.5	>24	9 - 12	>18	8
17	>44.2	24.9 – 18.1	>24	9 - 12	>18	8

FEMALE

AGE	Mile Run VO2 max	Body Mass Index	Curl ups	Trunk Lift	Push Ups	Sit & Reach
13	>39.7	22.9 – 15.7	>18	9 - 12	>7	10
14	>39.4	23.6 – 16.2	>18	9 - 12	>7	10
15	>39.1	24.3 – 16.7	>18	9 - 12	>7	12
16	>38.9	24.8 – 17.1	>18	9 - 12	>7	12
17	>38.8	24.9 – 17.5	>18	9 - 12	>7	12

Mile