Skid Monster
In-car
Lesson Sheets

Period **4-5**

Phase ONE: Habits 1, 2, 4

Skid Monsters

Name_____ _____
Letter

D Targeting Practice

Target Selection

- ***Checks the left, front, right zones*** before moving
- ***Turns head on target before steering***
- ***Positions Car on Target,*** uses *transition pegs*
- See target with ***central vision,*** see car to target with ***fringe vision***

Steering Techniques

- Uses a ***balanced hand position***
- ***Hand-Over-Hand*** and ***Pull-Push***
- ***Knuckles and thumbs*** on outside of wheel

Acceleration Techniques

- ***Sees open space before accelerating***
- Sets Car into motion ***smoothly***
- Uses ***transition pegs*** to increase speed

Braking Techniques

- Applies ***brake with right foot***
- Uses ***controlled threshold braking***
- Holds the brake until at the ***transition peg***
- Brings the vehicle to a ***smooth stop***

E Targeting-SKID Detection

Targeting From Stopped and Moving Positions – 180 degree turns

- ***Searches left, front, right*** zones before moving
- ***Smooth Acceleration*** on Starts
- On Moving Turns: ***Applies brake effective - ly before steering***
- ***Turns Head On Target*** before steering
- ***Detects and Corrects Skid yaw*** immediately
- ***Off pedals during skid*** (no gas, no brake)
- ***Keeps head turned towards target*** during skid recovery
- ***Steering recovery*** initiated at ***Transition Peg***
- On stops: ***Smooth Braking,*** no pitch felt

Braking Techniques

- Applies the ***brake with the right foot***
- Uses ***controlled threshold braking*** efficiently
- On Moving Turns: ***Keeps Partial Braking Pressure*** until ***Transition Peg***
- Brings vehicle to a ***smooth stop***

Rating:

√=Good, no coaching **X**=Needs practice

(1) Shows Driver-Vehicle Readiness

- ☐ (a) ALWAYS use safety belts and headlights
- ☐ (b) Show correct seating position
- ☐ (c) Show correct position and use of steering wheel
- ☐ (d) Stay focused on driving task

(2) Keeps Car in Balance

- ☐ (a) Make smooth and effective starts and stops
- ☐ (b) Get speed control before turning steering wheel
- ☐ (c) Use controlled braking
- ☐ (d) Use "Transition Pegs" while braking or accelerating

(4) Establishes Clear Path

- ☐ (a) Search the "Target Area"
- ☐ (b) Evaluate intended path of travel
- ☐ (c) See open space before accelerating
- ☐ (d) Turn head before turning steering wheel

Period **6-7**

Phase Two: Habits 3, 4, 6, 7, 8

Skid Monsters

Name_____ _____ Letter

G Simulated Late Exiting

Observe these Behaviors first

- *Reduces speed before steering*
- *Turns Head On Target* before steering

Behaviors to Maintain Control

- *Detect and Correct Skid yaw* immediately (stay off pedals during skid recovery)
- *Keeps head turned towards target*
- On Moving Turns: *Keeps Partial Braking Pressure* until *transition peg*
- *Steering recovery* initiated at *Trans. Peg*
- *Smooth Acceleration* on Starts: no pitch
- On stops: *Smooth Braking*, no pitch

H Car's Pulled Off Target

On Target/Off Target

- Foot off pedals as *car moves off target*
- *Keeps Head On Target* as car gets off target
- *Detect and Correct Skid yaw* immediately
- *Keeps head turned towards target*

After recovery while Making Turn for New Target

- *Keeps Partial Braking Pressure* until *T. peg*
- *Steering recovery* initiated at *Transition Peg*
- *Smooth Acceleration* on Starts: no pitch felt
- On stops: *Smooth Braking*, no pitch forces

Left and Right Turns–Stopped Position

- *Signals for turn 5 seconds* before stop
- Begins *braking effectively* on approach
- *Checks mirror* when foot goes on brake
- *Makes smooth stop*
- Uses side position *reference point*

J Turns from a Stop Sign

- Uses *reference points* for stop position
- Selects *Target before beginning turn*
- *Searches intersection* left, front, right zones
- Uses forward position *reference point*
- *Turns head* onto target *before moving*
- See cones with *peripheral vision*
- *Accelerates* at *Transition Pegs*
- Uses *effective steering* technique
- *Detects and correct skid yaw* (off pedals during skid)
- *Timely Acceleration* when zones are open

Key Behaviors to Cue for Turns

- **Select Target**
- **Search Left-Front-Right zones**
- **Turn Head**
- **Use Transition Peg**

K Turns While Moving

Left and Right Turns–Moving Position

- *Signals* for turn *5 seconds* before stop sign
- Uses *Target Area Searching*
- Begins *constant braking* during approach
- *Check mirror* when foot goes on brake
- *Brake controls speed* before turning
- *Searches intersection* for clear L-F-R zones
- *Turns head* to new target area *before steering*
- *Holds partial braking* until Transition Peg
- *Detects* and *corrects skid yaw*, no hesitation
- *Keeps head* and *eyes focused* to target area
- Uses *effective steering* technique
- At *Transition Peg*, effectively *accelerates w/o hesitation* to straighten the car on target.

LOS LOS-POT Blockage

- *Knows LOS-POT* means a blockage to your Line-Of-Sight and/or Path-Of-Travel
- Responds to *LOS-POT with speed reduction*
- Responds to *LOS-POT with lane position - ing adjustment*

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(3) Accurately Positions Vehicle

- ☐ (a) Position right side to road edge with accuracy
- ☐ (b) Position front bumper to intersection with accuracy
- ☐ (c) Use lane positions effectively

(4) Establishes Clear Path

- ☐ (a) Search the "Target Area"
- ☐ (b) Evaluate intended path of travel
- ☐ (c) See open space before accelerating
- ☐ (d) Turn head before turning steering wheel

(6) Controls Intersections

- ☐ (a) Search Left, Front, and Right zones for "Open" zones
- ☐ (b) Detect LOS-POT blockages
- ☐ (c) Control four-second danger zone
- ☐ (d) Control two-second "Point of No Return"

(7) Controls Rear Zone

- ☐ (a) Check mirrors when braking
- ☐ (b) Check blind spots before moving into another lane

(8) Controls Curves

- ☐ (a) Use lane positions correctly
- ☐ (b) Reduce speed within four-second danger zone
- ☐ (c) Use "Transition Peg" to determine when to accelerate
- ☐ (d) Look through curve for "Open/Closed POT"

Period **8-9**

Phase Three Habits 2,4, 5, 6

Skid Monsters

Name_____ _____ Letter

N Constant Radius Circle Speed Control

Establish Speed of 10 mph, after success increase speed to 12 mph

This activity begins in the non-monster mode. **After a few revolutions switching to the MONSTER mode** represents hitting "black ice."

- Establishes ***constant speed***
- ***Detects front of the car's movement*** off its constant radius (yaw angle)
- Has ***central vision focused through curve***, not at yaw angle
- Uses ***fringe vision*** to keep car on course
- ***Takes corrective steering action*** no hesitation
- Keeps car in ***travel path***
- ***Controls speed*** of car

After correcting skid...

Stay close to the cones and keep increasing speed until you are not able to maintain a controlled yaw. **Repeat process with turns to the right.**

O Constant Radius Circle Entering Curves

Entering Curves (**LP**=Lane Position)

This activity begins in the Monster Mode. You will start on a straight path before entering the "curve".

- ***Target Area Searching*** approaching the curve.
- Lane Position: ***Constant LEFT CURVES: approach LP3, apex LP1, exit LP1***
- Lane Position: ***Constant RIGHT CURVES: approach LP2, apex LP1, exit LP1***
- Effective use of ***speed control***
- ***Applies brake before turning*** (On brake to prevent skid, off brake during skid)
- ***Turns head to look into curve***
- ***Detects and corrects skid yaw***
- Uses ***effective steering technique***

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(2) Keeps Car in Balance

- ☐ (a) Make smooth and effective starts and stops
- ☐ (b) Get speed control before turning steering wheel
- ☐ (c) Use controlled braking
- ☐ (d) Use "Transition Pegs" while braking or accelerating

(4) Establishes Clear Path

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Q Decreasing Radius Curve and Exiting Curves

Decreasing Radius Curve

• **Part 1:** You will travel in a constant radius curve. After drivin around the circle a few times at the maximum controllable spe will turn into the inside gates of the curve.

• **Part 2:** You will do the same activity at a slower speed aroun constant radius before turning into the decreasing radius gates. Compare the control you have when speed is not excessive.

- ***Detects front of the car's movement*** off its constant r (yaw angle)
- Has ***vision focused through curve***, not at yaw angle
- ***Takes corrective steering action*** without hesitation

Exiting Curves

This activity begins in the Monster Mode. After traveling at lea or two times around the circle you will exit the circle, which wi resent exiting a curve.

- Sets up correct lane position in preparation for exiting
- Lane Position for ***LEFT CURVES: apex LP1, exit LP1***
- Lane Position for ***RIGHT CURVES: apex LP1, exit LI***
- Effective use of ***speed control***
- ***Turns head to new target area*** before steering
- ***Detects and corrects skid yaw*** no hesitation
- ***Keeps head and eyes focused*** to target area
- With car in control, ***goes from brake to acceleration e tively*** without hesitation when car is ***at Transition Peg*** ner post, rear view mirror)

(5) Handles "LOS/POT Blockages"

- ☐ (a) Detect LOS-POT blockages
- ☐ (b) Check for escape/alternate path
- ☐ (c) Get best speed control/lane position
- ☐ (d) Control four-second danger zone

(6) Controls Intersections

- ☐ (a) Search Left, Front, and Right zones for "Open" zones
- ☐ (b) Detect LOS-POT blockages
- ☐ (c) Control four-second danger zone
- ☐ (d) Control two-second "Point of No Return"

Period
11-12

Phase Four Habits 3, 4, 5, 6, 7, 8
Skid Monsters

Name_____ _____
Letter

R Curves, Turns and Roundabouts

Compare Speed of Success and Failure

- Uses ***Target Area Searching*** on approach
- LP for Constant ***LEFT CURVES: approach LP3, apex LP1, exit LP1***
- LP for Constant ***RIGHT CURVES: approach LP2, apex LP1, exit LP1***
- Effective use of ***speed control***
- ***Applies brake before turning***
- ***Turns head to new target area*** before steering
- When Braking is needed, ***holds partial brake pressure until at Transition Peg***
- ***Detects and corrects skid yaw*** no hesitation
- ***Head and eyes focused*** to target area
- Uses ***effective steering technique***
- With car in control, ***goes from brake to acceleration effectively*** without hesitation when car is ***at Transition Peg***
- Entering and leaving **Roundabouts** effectively. (always travels counter clockwise
- Experiences ***effects of curve's radius*** on speed control
- Experiences ***effects of road grade and camber*** on car control
- Experiences ***effects of One or Two Excessive miles per hour*** on control

Xa Vehicle Failures

Tire Blowout

- Foot comes off the pedals as the steering wheel is moved off target to ***simulate the tire blowout***
- ***Keeps Head On Target*** as steering wheel moves car off target
- ***Detect and Correct Skid yaw*** immediately (stay off pedals during skid recovery)
- ***Keeps head turned towards target*** during skid recovery
- With car back in control, ***selects a safe location to deal with the failed tire***

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(8) Controls Curves
- ☐ (a) Use lane positions correctly
- ☐ (b) Reduce speed within four-second danger zone
- ☐ (c) Use "Transition Peg" to determine when to accelerate
- ☐ (d) Look through curve for "Open/Closed POT"

Period **13-14**

Phase Five Habits 2, 4, 5, 9, 10

Skid Monsters

Name_____ _____ Letter

T Evasive Maneuver

Behaviors For Evasive Lane Change

- ***Holds the steering*** in a ***9-3 position***
- ***Focuses on target area*** — not on what is being avoided
- Makes ***initial steering*** with both hands on wheel
- ***Stays off the brake and the gas pedals*** while steering
- ***Takes counter steering actions*** to keep roll axis in balance
- When car goes into a skid, ***turns steering rapidly towards target***
- When ***steering is controlled***, applies ***brake or acceleration*** as needed

Behaviors For Evasive Braking

- ***Checks rearview mirror*** when foot goes on brake
- ***Holds the steering*** in a ***9-3 position***
- ***Focuses on target area*** — not on what is being avoided
- For ***ABS brakes: applies firm pressure*** and holds pedal
- **No ABS** brakes: ***uses controlled threshold braking*** without locking the wheels
- If car skids, releases brake pressure and ***turns steering rapidly towards target area***

U Evasive Demonstrations

Variables You Will Experience in this Set

- Effects Speed has upon car control
- Effects Lane Positioning has upon steering inputs
- Effects Following Time has upon taking an evasive braking or steering action.

Demonstrates Value of Four-Second Following Time

- Experiences the ***effect following time*** has upon ***car control for evasive steering and braking***
- Experiences the ***effect following time*** has upon ***reducing driver stress***

Demonstrates Value of Lane Positions

- Experience the value of an ***early detection of an LOS-POT blockage***
- Experiences the importance of using the ***proper lane position***
- Experiences the importance of ***minimizing steering action***

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(2) Keeps Car in Balance

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9) Controls Vehicle in Front

- ☐ (a) "Close In" on slower moving vehicles gradually
- ☐ (b) Keep four-second following time
- ☐ (c) Stop behind vehicle to see rear tires

(10) Controls Emergency Situations

- ☐ (a) Detect "Off Target" skid conditions
- ☐ (b) Take corrective actions without delay
- ☐ (c) Point head and eyes toward "Target Area"
- ☐ (d) Effectively use "Vehicle Controls"