NHRA Lesson Plans

YOUTH & EDUCATION SERVICES (YES) PROGRAM

In Partnership with the NHRA & Mission School District

Sponsored Nationally by:

Y.E.S. PROGRAM
NHRA YOUTH AND EDUCATION SERVICES®

S.T.E.M.
SCIENCE • TECHNOLOGY • ENGINEERING • MATH

In Partnership with the NHRA & Mission School District

NHRA Lesson Plans

YOUTH & EDUCATION SERVICES (YES) PROGRAM

The National Hot Rod Association was founded in 1951 as a means of getting hot rodders off the streets and into a safer environment. Today, the NHRA is the world's largest motorsports sanctioning body and the foremost promoter of drag racing in the world. It provides millions of racing fans with the fastest and most spectacular form of entertainment on wheels. NHRA's premier racing series, the NHRA Mission Foods Drag Racing Series, features 24 championship series events each year. For more information, log on to NHRA.com or visit the official NHRA pages on Facebook, YouTube and Twitter.

The NHRA YES (Youth & Education Services) program is a highly successful full-time educational motorsports program. The YES program will be featured at 13 of the 24 races on the NHRA Mission Foods Drag Racing Series circuit. Founded in 1989, the YES program is the only full-time educational program in motorsports that provides quality programs and activities for schools and youth organizations nationwide.

The program allows participants the opportunity to learn about and explore various career opportunities while gaining a new perspective on STEM (Science, Technology, Engineering and Mathematics) by taking what they acquire in the classroom and applying it to real-world experiences.

Mission Raceway would like to thank the NHRA for allowing us to revamp their lesson plans to suit the needs of our students and to meet the requirements of our BC Curriculum.

A HUGE thank you to Camille Anderson, Curriculum Mentor Teacher for Mission School District for your hard work in rewriting these resources and to Mission Schools Superintendent Angus Wilson, for your support with our Youth Education Program at Mission Raceway.

Table of Contents

Additional Resources

HERE ARE A FEW EDUCATIONAL VIDEOS TO CHECK OUT:

NHRA Sports Science

https://www.youtube.com/watch?v=f9fG1CTvu0I&feature=youtu.be

How a Top Fuel Dragster Works

https://www.youtube.com/watch?v=-VF0JwxQqcA

NHRA YES Day Supplemental Videos:

Use your email address, password: NHRAYES2020

https://www.nhra.com/promo/yes#supplement

In Partnership with the NHRA & Mission School District

Science
Acceleration at work

Curriculum Topics
Acceleration Inertia Speed Effect of Movement

BC Curriculum Standards

Curricular Competencies:

Demonstrate a sustained intellectual curiosity about a scientific topic or problem of personal interest

Make Observations aimed at identifying their own questions, including increasingly complex ones, about the natural world Use knowledge of scientific concepts to draw conclusions that are consistent with evidence

Science 10
Law of conservation of energy potential and kinetic energy transformation of energy

Physics 11 ADST Grade 7,8,9
Power Technology effect of mass and inertia on speed and distance

Being a drag racer requires more than just putting the pedal to the metal. In a Top Fuel drag race, the drivers must harness a 10,000-horsepower monster while stepping on the pedal in a race to the finish line. In a Pro Stock race, drivers have to shift through multiple gears to make the car go faster. How and why does the car accelerate?

Objective: To illustrate the concept of acceleration and how shifting gears in a drag race affects the speed at which a Pro Stock car is moving. Students will be asked to evaluate the effect on the movement of a bowling ball when they hit it rhythmically with a croquet mallet.

Time Required: One Class Period

Materials Needed:
1 croquet mallet , 1 bowling ball, 1x 25-foot (7.62 m) track on a hard, smooth floor, marked out in 5 increments of 5 feet (1.52 m)
5 stopwatches

Directions:

1) Distribute the stopwatches to five students deemed “timekeepers,” and assign each timekeeper to one section of the track. Assign five more students as “clutch specialists,” who count the number of hits that occur in each of the sections. Designate one student as he “driver” to hit the ball down the track with the croquet mallet. Finally, select a “safety crew” to catch the ball as the end of the track.
2) At the command of “go,” the driver begins tapping the bowling ball down the track with the croquet mallet. The timers start their stopwatches when the ball enters their respective section and stop them as soon as the ball exits it. The clutch specialists count the number of taps that occur in their assigned section. Record the information where everyone can see and evaluate the results.
3) Create a chart, listing each of the five sections, the time it took for the ball to move through each section and the number of taps the driver gave the ball in each section.

Calculations:
Speed: distance of one section (5 ft. / 1.52 m) / the time for that section
Acceleration: a later speed—a beginning speed
Actual Acceleration: acceleration / the time difference between a slower section and a faster section

Questions:
Why does the number of mallet taps decrease as the ball moves down the track?
What affects the acceleration of the ball as it moves down the track?
What causes it to speed up or slow down?
How do more taps at the beginning affect the speed at the end?
How does the timing of the hits affect the speed?
What is inertia and how is it represented when the ball is at rest?
How is inertia represented when the ball is in motion?
How does this bowling ball experience relate to a drag race and the shifting of gears?

Y.E.S. PROGRAM NHRA YOUTH AND EDUCATION SERVICES

NHRA S.T.E.M. SCIENCE • TECHNOLOGY • ENGINEERING • MATH

In Partnership with the NHRA & Mission School District

Technology

Precision - Precicely

Curriculum Topics
Averages & Percentages

BC Curriculum Standards

Curricular Competencies:

Math: Use tools or technology technology to explore and create patterns and relationships, and test conjectures
Science: Observe, measure, including digital technologies, with accuracy and record data (qualitative and quantitative), using equipment, and precision

Math 8 and Workplace Math 10 Content

Central Tendency Foundations Math 11 Content

Applications of Statistics: posing a question about an observed variation, collecting and interpreting data, and answering the question

Science for Citizens 11

Applications of materials science

Machining and Welding 12

Precision Measurement

Objective: To illustrate the important role technology plays in motorsports.

Time Required: One Class Period

Materials Needed:

1 electronic stopwatch that measures to a hundredth of a second

Directions:

1) To help prepare for the following exercise, review the four principles of precision, listed below, with your students either by reading them aloud or by reproducing and distributing them as a take-home reading assignment.
2) Divide your students into teams of three, designating a driver, a crew chief and a track official.
3) Complete the exercise on the next page.

In drag racing, precision marks the difference between amateurs and professionals. A solid understanding of four types of precision - design, mechanical, electronic and human – is necessary to be successful as a driver, mechanic or track operator.

DESIGN PRECISION: There are many different classes of racing vehicles, from super-long Top Fuel dragsters to sleek Pro Stock Motorcycles. Each vehicle is designed according to standard specifications within their respective category. Within these specifications, designers are allowed to create the most mechanically and aerodynamically efficient vehicles they can imagine. These vehicles are primarily designed on computers in which every dimension, specification and detail is plotted with exact precision.
MECHANICAL PRECISION: Another kind of precision is mechanical precision. Many parts of the car can be adjusted to improve performance, from the clutch and the pistons to the transmission and the tires. Some cars are outfitted with computers that automatically send real-time performance information to a technician in the crew. Based on this information, the crew can make precise adjustments to the car, thus improving its performance for the next run.
ELECTRONIC PRECISION: With cars moving at speeds of more than 330 mph, its impossible for a human being to react quickly enough to time competitive runs. Although stopwatches were originally used, increased speeds and closer competition required greater precision in timing. Electronic timers now handle the task of timing races. From the electronic relay at the pre-stage area, to the laser beams that have become the finish line, precision timing of drag races has become entirely electronic.
HUMAN PRECISION: As the lights flash down the starting tree, drivers rev their engines to the perfect number of revolutions and at the "go" signal peel out down the track. Their bodies braced in the chassis, their hands holding the steering column firmly and shifting gears within seconds in order to maximize performance, drivers not only require considerable physical strength, but also excellent timing. Much of a driver's success depends upon this precise timing; it's what separates the winners from losers.

Y.E.S. PROGRAM
NHRA YOUTH AND EDUCATION SERVICES
S.T.E.M.
SCIENCE • TECHNOLOGY • ENGINEERING • MATH

In Partnership with the NHRA & Mission School District

Technology

Precision - Precicely

A drag racer's success depends on many things, but one important factor is the ability to react to the countdown of lights on the starting tree. The starting tree is the tall electronic starting device between the lanes at the starting line. As the drivers sit ready to race, the lights turn on one by one down the tree. Then, as the bottom light turns green, racers gun their vehicles and fly down the track. Test your reflexes with the following exercise.

Directions:

1. Driver starts the stopwatch and stops it as close to three seconds as possible.
2. The driver reports the results of his or her trial to the track official, who notes it in the chart below, recording the times to the nearest hundredth of a second.
3. The crew chief resets the stopwatch and encourages the driver on to the next
4. After five trials, the track official calculates the average.

Trial Number	1	2	3	4	5
Elapsed trial time					
Amount of trial time over or under three seconds					

Calculate the average of your first five trials. Now perform the experiment five more times and record your data below. Then calculate the average amount of times over or under three seconds again.

Trial Number	6	7	8	9	10
Elapsed trial time					
Amount of trial time over or under three seconds					

Questions:

Did your results improve through the first five trials?
What about through the next five?
Did your average improve from the first five trials to the second five?
If attending the races, bring a stopwatch and time the races from when the green light on the starting tree lights up to when the dragster crosses the finish line. See how close your times are to the official times.

Mission Raceway Park

In Partnership with the NHRA & Mission School District

Engineering Innovation & Safety

Curriculum Topics:
Measurement

BC Curriculum Standards

Curricular Competencies:

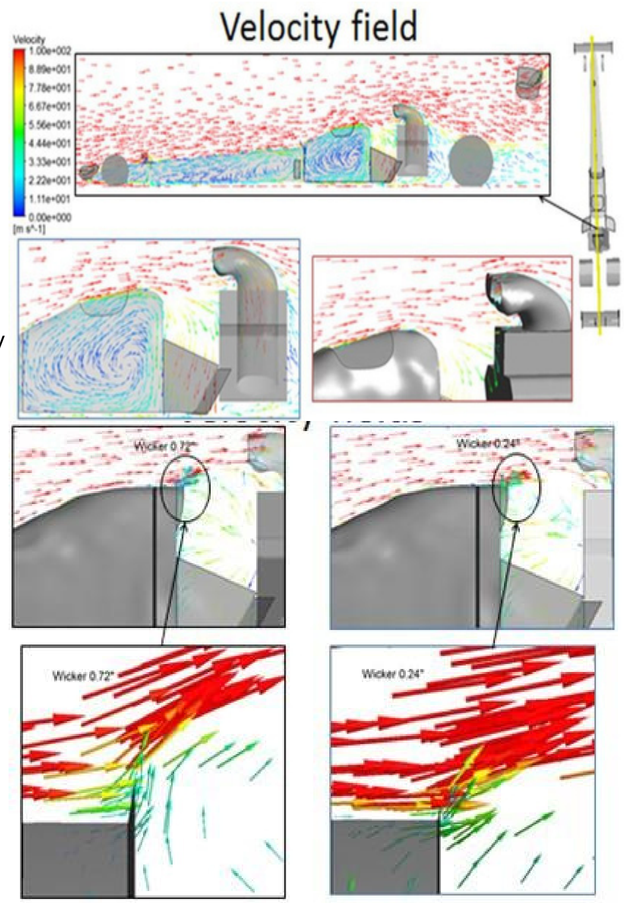
Defining Engineering Problems

Issues of risk mitigation that are qualified through designs that help improve safety practices.

Using Computational Thinking

Use computer simulations to predict the effect of a design solution on systems and/or the interactions between systems.

Don Schumacher Racing (DSR) and the USA team made a major contribution to the sport of drag racing in August 2012 by unveiling a new safety canopy. The new safety canopy propelled Top Fuel drag racing firmly into the 21st Century. The canopy was developed by DSR, James Brendel and Indianapolis-based Aerodyne Composites Group. The sides and rear of the canopy are made of a Kevlar and carbon fiber combination that slips over an existing chassis. The capsule is reinforced for further side protection. The canopy can be quickly released inside by the driver or at the rear by crew or safety workers. The cockpit also carries a fire suppression system and fresh-air breathing system similar to those used in Funny Cars.



Before the NHRA Technical Operations Department and Purdue University Center for Systems Integrity (PCSI) approved Tony Schumacher's canopy for competition, numerous considerations and testing had to be performed. First and foremost, the car was reviewed to ensure Tony was safe inside.

Secondly, the car was analyzed in comparison to a non-canopy car to verify that it did not have an aerodynamic advantage. Since a Top Fuel car accelerates up to 330 mph there are no wind tunnels that can produce those types of wind speeds. Therefore the testing was performed using Computational Fluid Dynamics (CFD), which is essentially a computerized Wind Tunnel. To the right are a couple of examples showing how the wind flows around the car at high speeds. The model in the top right is from the non-canopy car showing the even air flow over the car and through the rear wing. You also can notice the air circulating in the driver's compartment.

During this investigation, researchers found that the canopy car had a slight aero advantage over non-canopy cars. The air coming off the top rear of the canopy and into the injector hat caused concern. After adding a wicker (carbon fiber wind deflector shown to the right), additional testing showed the aero advantage was removed and the results were nearly identical between the canopy and non- canopy cars, proving no clear advantages. From the CFD simulations, you can see that that the air flow is directed up and is more disturbed (green and yellow arrows). This is why the canopy cars are required to run a 0.75" wicker on the trailing edge of the canopy.

In Partnership with the NHRA & Mission School District

Engineering

Innovation & Safety

1) Is a canopy Top Fuel car quicker than a non-canopy Top Fuel car?

2) Could CFD analysis be used by other car manufacturers (i.e. GM, Ford, Chrysler, Toyota)?

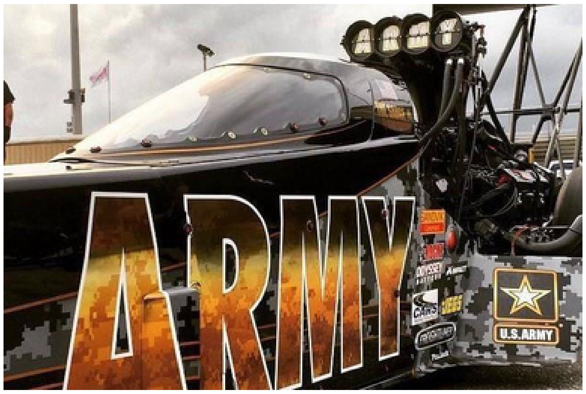
3) In addition to Tony Schumacher's team, name two other NHRA Top Fuel teams that run the canopy?

A.

B.

4) Whit which Indianapolis-based company did Don Schumacher Racing and Tony Schumacher's team partner with to develop the canopy?

5) To ensure that the aerodynamics of the canopy version of a Top Fuel car did not give it an advantage over the competition, what university did NHRA's Technical Operations Department use for the CFD simulation study?



Canopy

Non-Canopy

In Partnership with the NHRA & Mission School District

Math Calculate the win

Curriculum Topics:
Geometry
Computation Algebra

BC Curriculum Standards

Curricular Competencies:

Math 7
Circumference and area of circles

Model mathematics in contextualized experiences

Math 8
Numerical proportional reasoning (rates, ratio, proportions, percent)

Math 10
Workplace Metric and imperial measurement and conversions

Objective: To challenge students with math problems using real-life motorsports scenarios while demonstrating the importance of math on motorsports careers.

Time Required: One class period

Directions: Have your students complete the following four problems.

1. A drag race is 1,000 feet (304.8 m) and takes less than four seconds. How far can a car travel in a given number of seconds if its speed is 60 mph (96.6 km/h) ? Draw the table below on the board and fill it in.

Number of seconds, x	1	2	3	5	10	15
Distance traveled, y (in feet)						

2. When two dragsters approach the starting line, their front wheels trip a pre-stage light beam that activates the blue LED lights on the starting tree. The drivers then need to roll approximately seven inches to the starting line. If the front tires on a dragster are 20 inches (50.8 cm) in diameter, determine the number of revolutions necessary to roll the seven inches (17.8 cm) to the starting line.

3. Handicapping equalizes competition between vehicles of varying classes and performance potential by giving a head start to the car with a lower average elapsed time in other races. Car A has elapsed times of 17.78, 17.74, and 17.76 seconds for the quarter mile. Car B has elapsed times of 15.27, 15.22, and 15.26. Each driver “dials in” their average elapsed time. How much of a head start will Car A have? If each car then races and has an elapsed time equal to its best time on that track, which car will win and by what amount of time?

4. Speed is measured in the “speed trap” which is defined as the last 66 feet before the finish line. If, on a quarter mile track, Car A went through the speed trap in 0.782 seconds and Car B went through it in 0.791 seconds. What are their respective speeds?

Math

Calculate the win

1. The speed of a car on a NHRA drag strip is averaged over the last 66 feet before the finish line. Therefore the speed of a Top Fuel car is averaged from 934 feet to 1000 feet. On Tony Schumacher's 330 mph run, how long did it take Tony to travel the last 66 feet before reaching the finish line?

$\text{Speed} = \frac{\text{Distance}}{\text{Time}}$ **therefore** $\text{Time} = \frac{\text{Distance}}{\text{Speed}}$ $\frac{\text{Feet}}{\text{Sec.}} = \frac{\text{Miles}}{\text{Hour}} \times \frac{\text{3600 Sec.}}{\text{5280 Feet}}$

1. A drag race is 1,000 feet (304.8 m) and takes less than four seconds. How far can a car travel in a given number of seconds if its speed is 60 mph (96.6 km/h) ? Draw the table below on the board and fill it in.

Number of seconds, x	1	2	3	5	10	15
Distance traveled, y (in feet)						

2. How long would it take a passenger car traveling 60 mph?

Fun Fact: An average blink of your eye is 0.3 to 0.4 seconds

In Partnership with the NHRA & Mission School District

Math

Calculate the win

Facts about Tony Schumacher's Top Fuel dragster:

Exterior
Wheelbase: 300 in.
Length: 33.5 ft.
Width: 51 in.
Height: 89 in.
Tread Front: 31 in.
Tread Rear: 51 in.
Weight: 3,230 lbs. (including driver)

Engine
Block: Aluminum DSM
Bore & Stroke: 4.187" x 4.500"
Compression: 6.5:1
Horsepower: 10,000
Maximum RPM: 8,500
Fuel type: Sunoco Nitromethane (up to 90%)

Performance
Best 1,000-foot elapsed time: 3.735 seconds
Best 1,000-foot speed: 330.55 mph
5 G-forces at the starting line
Negative 5 G-forces upon deployment to twin parachutes at 300 mph

Top Fuel Fun Facts

0-60 mph takes .54 second 0-100 mph takes 1.04 seconds 0-200 mph takes 1.96 seconds 0-300 mph takes 3.05 seconds

Y.E.S. PROGRAM
NHRA YOUTH AND EDUCATION SERVICES®

S.T.E.M.
SCIENCE • TECHNOLOGY • ENGINEERING • MATH

In Partnership with the NHRA & Mission School District

Math Calculate the win

From Tony's dragster facts, calculate the following and show your work on the right.

1. Convert the weight of the car to its mass in kilograms:

1 kilogram = 2.205 lbs.

Mass of Car: _______________kg

2. Convert the length of the track from feet to meters:

1 foot = .3048 meters

Length of Track: ____________________m

3. Using Tony's career-best elapsed time, find the average acceleration of the car in m/s2:

$$\text{acceleration} = 2 \times \frac{\text{length of track(m)}}{\text{time2}}$$

Average Acceleration ____________ m/s2

4. Convert the average acceleration, which you found in #3, to G units:

$$1G = \frac{\text{acceleration (m/s2)(\#3)}}{\text{9.8 (m/s2)}}$$

Average Gs: ______________________________

5. Calculate force needed to push the car:

F = mass(#1) x acceleration(#3)

Average Force: ____________________________N

NHRA YOUTH AND EDUCATION SERVICES Y.E.S. PROGRAM

S.T.E.M. SCIENCE • TECHNOLOGY • ENGINEERING • MATH

In Partnership with the NHRA & Mission School District

Math

Calculate the win

From Tony's dragster facts, calculate the following and show your work on the right.

6. Calculate the work done to push the car in Joules:

W = force(#5) x distance(#2)

Average Work: ______________________________

7. Calculate the power generated by the car in watts:

$$P = \frac{\text{work}(\#6)}{\text{time}}$$

Average Power: ____________________W

8. Convert your answer from #7 to horsepower:

$$HP = \frac{\text{power (watts) (\#7)}}{746}$$

Average Horsepower: ______________________HP

Y.E.S. PROGRAM
NHRA YOUTH AND EDUCATION SERVICES®

S.T.E.M.
SCIENCE • TECHNOLOGY • ENGINEERING • MATH

In Partnership with the NHRA & Mission School District

Language Arts

Let the race begin

Curriculum Topics:
Composition

BC Curriculum Standards

English Grade 7-12

Curricular Competencies:

Recognize and identify the role of personal, social, and cultural contexts, values and perspectives in text

Recognize how language constructs personal, social and cultural identity

Construct meaningful personal connections between self, text, and world.

Career Education 7-9, CLE, CLC Curricular Competencies
Apply a variety of research skills to expand their knowledge of diverse career possibilities and understand career clusters

Explore volunteer and other new learning experiences that stimulate entrepreneurial and innovative thinking

Objective: To develop writing skills and to encourage students to think about the wide variety of careers and opportunities available in the drag racing arena.

Time Required: One Class Period

Directions:
1. Alter the following lesson to align with your grade level and content you are wishing to connect with.

2. Distribute the following career list and biography excerpt.

3. Ask your students to select a career from the list below and write a biography for themselves, imagining that it is 10 years from today and that they have advanced to the top of the field that they have chosen. Encourage them to use Tony Schumacher's biography as an example of how to write their own.

Tony Schumacher's NHRA drag racing career as the driver of the U.S. Top Fuel dragster began when he was a teenager. On the next page read this excerpt from the beginning of his professional biography to see how he turned a family business and a love of sports into a career - and won eight world championships along the way.

Although drag racing may seem like a sport for fast drivers and mechanics only, it offers a variety of careers to anyone interested. From the chassis builders, crew chiefs and welders, to the announcers, graphic designers and journalists, NHRA drag racing offers plenty of opportunities.

Listed below are only a few options.

Technical:
Brake Specialist Chassis
Builder Clutch Specialist
Computer Technician
Engine Technician
Machinist Transmission
Technician Welder

Competition:
Crew Chief Driver
NHRA Administrator
Safety Team Team
Manager

Marketing:
Advertising Direct
Sales Event
Coordinator Market
Research
Promotions
Sponsorship Track
Operator

Communications:
Public Relations
Announcer Electronic
Graphics Journalist
Photographer Technical
Writer Television
Production

MISSION RACEWAY PARK

In Partnership with the NHRA & Mission School District

Language Arts

Let the race begin

Born on Christmas Day, 1969, in Canoga Park, Calif., Tony Schumach- er grew up in Park Range, Ill., watching his father Don "The Shoe" Schumacher dominate Funny Car drag racing while also building his family business, Schumacher Electric Corporation. Learning from his father, Tony developed his own quiet determination to someday become a champion, too. Although he excelled at football and hockey in school, drag racing was never far from Tony's mind. To no surprise, he began racing his street legal Pontiac Trans Am while still a teenager. At 19, Tony competed in his first NHRA event with a 1969 Super Street Chevelle. In 1992, Tony moved up to a 160-mph NHRA Super Comp dragster. His natural ability and enthusiasm caught the attention of Wayne Knuth, who asked Tony to drive his jet dragster, "Odyssey." In five years, Tony advanced from his 90 MPH Pontiac to the world's fastest jet-powered car. He and Knuth toured to every corner of North America in 1993 and 1994, thrilling crowds at large and small tracks with speeds regularly approaching 300 MPH. He graduated to a Top Alcohol Funny Car for the 1995 and 1996 seasons. In 1996, he got his first big break during the 42nd annual U.S. Nationals in Indy, finding himself in the middle of a huge moment. Schumacher had positioned him-self for a shot in the Peek Brothers' dragster for the season's biggest race, and he was hoping to simply make the 16-car field. That goal was accomplished as he qualified 16th. Schumacher raced all the way to the final and made it known he was more than just the son of the 1970 U.S. Nationals Funny Car champion. After competing in three more national events to close out the 1996 campaign, Schumacher competed in every NHRA national event the following season, making two final-round appearances during his first full season in the Top Fuel division. A final-round appearance late in the year highlighted a short 1998 season, when he competed in only 13 events. In 1999, he became the first driver to exceed 330 mph in competition. Tony became a force to be reckoned with in the NHRA Top Fuel class, winning six consecutive world championships from 2004 to 2009. On Sept. 14, 2008, Schumacher surpassed Joe Amato as the driver with the most wins in NHRA Top Fuel history with his 53rd career victory. He also has the world record for the fastest 1/4 mile Top Fuel run: 337.58 mph. As of 2015, Schumacher has made it to 129 final rounds, 77 event titles and eight world championships! As Tony always says, "To be the best, you got to beat the best."

CHAMPIONSHIP NHRA DRAG RACING

Y.E.S. PROGRAM

NHRA YOUTH AND EDUCATION SERVICES®

NHRA S.T.E.M.

SCIENCE • TECHNOLOGY • ENGINEERING • MATH

Mission Raceway Park

In Partnership with the NHRA & Mission School District

Language Arts

Let the race begin

Wouldn't it be cool to be an engine technician in the pit area, replacing a blown-out engine just before the final qualifying race? How would if feel to be in the driver's seat, watching the lights blink down the tree as you're about to hit the pedal and top your best speed of 330 mph?

Imagine yourself at the race track. It's time for the race to begin. You find yourself in one of the settings below. Read the four scenarios, select the one that is most exciting to you, and then write a one-page essay about what it would be like to be there.

Scenario 1: You've always loved tinkering with machines. Now you've become the crew chief for Tony Schumacher's U.S. Army Top Fuel dragster and you've inspected his car one last time before the final race of the day. You know that if your crew has done its job properly, the car could hit speeds over 330 mph. Describe the thoughts that go through your mind as you await the start of the race, less than one minute away.

Scenario 2: You were the only student in elementary school to meet the quota every time in the magazine drive. You were always the top seller, winning all the cool prizes while raising money for your school. Now, as the marketing director for the National Hot Rod Association, you've been asked by the track's owner to develop a special promotion that will attract more families to the next drag racing event. Your budget is modest, but you've got an idea. Describe what will be given to the first 2,000 fans entering the racetrack and why your promotion will be a success?

Scenario 3: You had your start in middle school when you read the daily announcements over the school intercom. Before long you started to improvise, adding personal comments that caught the ears and inter- est of your classmates. These days you're using your oratorical skills to announce drag races at trackside. Describe a race between two top con- tenders, from the tension-filled start to the exciting finish seconds later.

Scenario 4: You started taking pictures with a pocket-size camera as soon as you could wrap your fingers around it. Now that you are a chief photographer for the National Hot Rod Association, it's your job to capture the excitement, energy, and hard work involved in the world of drag racing. You've got a press pass that allows you unlimited access to events. De- scribe all the places you would go, who and what you would photograph and where you would position yourself when the races begin.

NHRA Championship Drag Racing Y.E.S. PROGRAM NHRA YOUTH AND EDUCATION SERVICES®

NHRA S.T.E.M. SCIENCE - TECHNOLOGY - ENGINEERING - MATH

In Partnership with the NHRA & Mission School District

Business Behind the Scenes

BC Curriculum Standards

Entrepreneurship and Marketing 10-12

ADST 7-9: Entrepreneurship and Marketing

Many connections to various content areas in the above courses- specialize the lesson to match your curriculum

Sponsorship:

1. Name two of the class sponsors for this race?

2. Who is the title sponsor of the race (if applicable)?

3. Who sponsors the YES Program Nationally?

4. Who sponsors the YES Program at Mission Raceway?

Vendors:

List two vendors at the track that interest you the most and three jobs you could get working for them.

Describe how the four P's of marketing apply to NHRA drag racing.

Product-

Price-

Place-

Promotion-