PDR Recipe
PDR Rules

- 20 Minutes of Presentation
- Reviewers May Not Interrupt Presentation
- Evenly Divided Among Team Members

- 20 Minutes of Questions
- Advisor May Be Present for the PDR, But May Not Speak During Presentation or Questions
PDR Questions

Is your project impressive?

Do your reviewers have advice?

What will you deliver for MDR?
Four speakers is 20 minutes is a lot of handoffs. Practice at least 2 times in front of advisor.
Recipe for a good PDR

What follows is a recipe for a good presentation. It is a guide, but you should adapt it to your project.
What is the Problem?

- Lemonade Stands Teach Entrepreneurship
- It is hard to run a lemonade stand because
  - Lemon Prices
  - Government Regulations
  - Low Price of Lemonade
How significant is the problem?

Small Businesses
- Employee Over Half of US Employees
- Generated 64% of New Jobs in Last 15 Years

Actual Forbes Story
Not Actual Forbes Cover

Police are shutting down unpermitted Lemonade Stands
Context: Effect on Individuals

Give children a chance without hurting small business people.
Context: Effect on Groups

Must produce a safe product.
Requirements Analysis: Specifications

- Learning Experience for Kids
- Safe for Kids to Operate
- Safe for consumers to Drink Lemonade
- Make Enough Money to Buy Permits
Requirements Analysis: Inputs and Outputs

Inputs
- Child Labor
- Lemons
- Water
- Sugar
- $500

Outputs
- Happy Kids
- Happy Customers
- Money
Design Alternatives
Our Solution: The Exploding Lemon

Increase Value by Making Lemonade an Experience.
Our Solution: Block Diagram
Block 1: Nozzle

Team Member Four

Requirements:
- Holds Lemon
- Injects Liquid
- Food Safe
Block 1: Nozzle Work Plan
Block 2: Juice Collector

Team Member Two

Requirements:
- Collects Juice
- Protects Spectators
- Enables Viewing of Explosion
- Food Safe
Block 2: Juice Collector Work Plan

Plexiglass Globe

80/20 Framing
Block 3: Pump and Tanks

Team Member Three

Requirements:

- Food Safe
- Easy to Clean
- Constant Pressure
- Battery Powered
- Makes 200 Lemonades
Block 3: Pump and Tanks
Block 4: Valves and Control

Team Member One

Requirements:
- Food Safe
- Push Button Control
- Easy to Clean
Block 4: Valves and Control
MDR Deliverables

- Safety Globe
- Exploding Lemon Manual Demo
- Food Grade Pump
- Stepper Motor Control