

WWW PPE Activity Station

PPE – The Last Line of Defense in Safety

Created by: Thomas Cagle

Purpose of the Activity

Help students and participants understand the importance of *Personal Protective Equipment (PPE)* in maritime work environments—through hands-on demonstrations, role play, and real-world hazard simulations.

Learning Objectives

- Identify basic PPE used in maritime operations
- Understand the purpose and proper use of each item
- Recognize PPE as the last line of defense against workplace hazards
- Experience the fit and feel of PPE through active participation
- Observe how PPE failure or complacency can lead to injury

Materials Checklist

Basic PPE Demonstration (Lesson 1)

- Personal Flotation Device (PFD)
- Hard Hat
- Leather Gloves
- Safety Glasses
- Steel Toe Boots

Hazard Simulation Props (Lesson 2)

Hand Protection

- Gloves (cotton, leather, rubber, Kevlar)
- Safety cutter
- Cutting board or clipboard

Foot Protection

- Safety toe boot
- Prop foot (or substitute)
- Hot dogs (to simulate toes)
- Spray foam, lag screws
- Baseball bat or blunt object

Head Protection

- Hard hat with liner

- Watermelon or pumpkin **x2**
- Stand (e.g., wok ring)
- Googly eyes (optional)
- Marker and towel
- Baseball bat or blunt object

Eye Protection

- Safety glasses
- Mannequin head
- Spray bottle with water + food coloring

Key Vocabulary

- Personal Protective Equipment (PPE)
- Personal Flotation Device (PFD)
- Hard Hat
- Safety Glasses
- Gloves
- Steel Toe Boots
- Buddy System
- Gunwale
- Port / Starboard

Activity Flow

Part 1: PPE Demonstration & Discussion

Opening Questions

- “What is PPE?”
- “Why do we wear it?”
- “Can PPE prevent all injuries?”

Demonstrate Each Item

1. **PFD** – Explain buoyancy and water safety
2. **Hard Hat** – Discuss falling objects and head protection
3. **Gloves** – Compare types and uses
4. **Safety Glasses** – Show differences from regular eyewear
5. **Steel Toe Boots** – Explain foot protection and durability

Interactive Moment (small groups)

- Invite volunteers to try on PPE
- Ask: “How does it feel?” “Where would you use this?”

Part 2: PPE Failure Demonstrations

Hand Protection Demo

- Line up gloves
- Use safety cutter to show how different gloves resist cuts
- Discuss task-specific glove selection

Foot Protection Demo

- Insert hot dogs into prop foot
- Place inside boot
- Strike with bat to simulate impact
- Show how steel toe protects vs. exposed foot

Head Protection Demo

- Use first watermelon/pumpkin to demonstrate damage without hard hat by striking it without the protective hat
- Place second watermelon/pumpkin in hard hat
- Add googly eyes for fun
- Strike with bat to show protection
- Compare with unprotected fruit

Eye Protection Demo

- Spray colored water at mannequin head
- Show how safety glasses block vs. exposed eyes

Student Engagement Tips

- Use humor and visuals (e.g., googly eyes, props)
- Ask open-ended questions:
 - “What would happen without PPE?”
 - “Have you ever worn safety gear?”
- Encourage respectful curiosity and hands-on participation

Extension Ideas

- Research real workplace incidents involving PPE
- Create a “PPE Poster” showing each item and its purpose
- Host a “Safety Gear Relay” where students race to don PPE correctly
- Tie into career readiness or maritime safety pathways

