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**Jr. Speed Busters Program: Live Vehicle Observations**

**Objective:**
Engage students in real-time speed monitoring to raise awareness about the importance of speed limits in school zones. Educate students about safe driving practices through seatbelt and distracted driving observations.

**Duration:**
3-4 hours

**Materials:**

* Speed Radar detection device (with supervision)
* Clipboards, Data Sheets
* 2 Handheld Click Counters
* Safety vests/Cones
* Yard Signs
* Traffic Safety Posters/Brochures
* Silicon Bracelets

**Steps for First Round of Observations:**

1. **Introduction (5 mins):** Explain the purpose and introduce special guests (e.g., police officers).
2. **Safety Briefing (5 mins):** Emphasize safety rules for roadside observers.
3. **Setup (10 mins):** Position safety cones and radar gun, assign roles (speed monitoring, data recording).
4. **Live Monitoring (30 mins):** Measure and record vehicle speeds, observe (if possible) driver behaviors such as phone use and seatbelt use.
5. **Data Input (20 mins):** Insert data in data spreadsheet template.

**Steps for Community Education/Driver Awareness:**

1. **Decorate Yard Signs (20 mins):** Have students put their own safety messaging to alert and educate drivers.
2. **Post Yard Signs in School Zone (10 mins):** Position yard signs in highly visible areas within the school zone limits.
3. **Display Safe Driving Posters in Schools (10 mins):** Have students hang provided safe driving posters throughout their school.

**Steps for Second Round of Observations:**

* 1. **Setup (10 mins):** Position safety cones, review roadside observer safety rules, position radar gun and assign roles (speed monitoring, data recording).
	2. **Live Monitoring (30 mins):** Measure and record vehicle speeds, observe (if possible) driver behaviors such as phone use and seatbelt use.
	3. **Data Input (20 mins):** Insert data in data spreadsheet template.

**Steps for Analyzing and Presenting Results:**

* 1. **Discussion (20 mins):** Analyze the data from each spreadsheet and discuss speeding patterns. Did average speed decrease?
	2. **Community Involvement (15 mins):** Involve a guest speaker to discuss road safety. Examples include local police, crash survivor, trauma center, Fire/EMS, etc.
	3. **Closing (10 mins):** Recap results, distribute rewards/certificates, prepare final report to send back to Jr. Speed Busters organizers. \*Optional- invite local media to cover the program and results.

**Learning Outcomes:**

* Students will understand how to measure speed and why speed limits are crucial.
* They will learn how data collection and analysis can help improve community safety.
* This activity will also help students develop teamwork and communication skills.

This activity is a great way to engage students in STEM while teaching them about an important real-world issue.