

Adverse Conditions – Icy Roads

# Demonstrate When It Is Near Freezing, Roads Become Slippery On Ice & Snow

Ingredients: Freezer, Ice Cubes.

Instructions: Demonstrate how road conditions can become slippery when ice and snow are near the freezing point (32 degrees, 0 degrees Celsius).

If you have access to a freezer for the classroom, conduct the activity there, otherwise assign this as a homework project.

* Take ice cubes out of the freezer and have students hold them between two fingers for a few seconds.
* Point out that the cubes are sticky.
* Have student place the cubes in a dish at room temperature for a few minutes.
* Have students pick up the ice cubes with two fingers.
* Point out that the cubes are now slippery.
* Ask to explain the differences and how this relates to road conditions.
* Discuss how black ice forms

When exposed to the warmer than freezing temperatures of the room, the melting ice cube becomes coated with a layer of water. When temperatures get above freezing, the ice warms up and begins to melt, placing a layer of water on top of the road surface.

# Handle A Rear Wheel Skid With Targeting Skills

Ingredients: Swivel Chair, Simulated Steering Wheel.

Instructions: Assign a student to sit in the chair that can swivel, holding a simulated steering wheel.

* Tell the student to pretend they are driving.
* Explain that in this simulation the intended path of travel is toward the target (select one in the classroom, such as the door.)
* Tell the student to keep the vehicle on target, and as soon as the vehicle gets off target, turn the steering wheel to get the front of the vehicle back on target. Remind that a slight steering effort is all that is necessary. If the vehicle begins to move quickly off target, a very rapid and full turning of the wheel would be necessary to get the tires back on target.
* Stand to the rear of the chair and swing the chair slightly off target in one direction or the other. Observe how the student responds with steering and head movement toward the target.
* Swing the chair again, changing the direction and quickness.
* Ask students to provide feedback about the driver’s head position and direction, speed and the extent of the steering wheel turns.