**What is DOPPLER RADAR?** 

MATERIALS: battery operated motor cassette & phone to record the sound.

PROCESS:

Record the sound of the razor.

Play back the recording and make sure it sounds exactly the same as the original sound the razor made.

Record the razor a second time. This time, however, move the razor towards and past the microphone a couple of times.

When you play the sound back, you will hear the pitch of the razor go up as it gets closer to the microphone and go down as it moves further away.

EXPLANATION:

Have you ever listened to a train whistle as it was coming toward you? You probably noticed that the pitch of the whistle changed as the train passed you and moved away. This change in the frequency of sound is called the Doppler Effect. **Doppler Radar** measures the changes in the frequency of the signal it receives to determine the wind. Doppler Radar detects precipitation intensity, wind direction and speed, and provides estimates of hail size and rainfall amounts. Doppler Radar gives forecasters the capability of providing early detection of severe thunderstorms that may bring strong damaging winds, large hail, heavy rain, and possibly tornadoes.