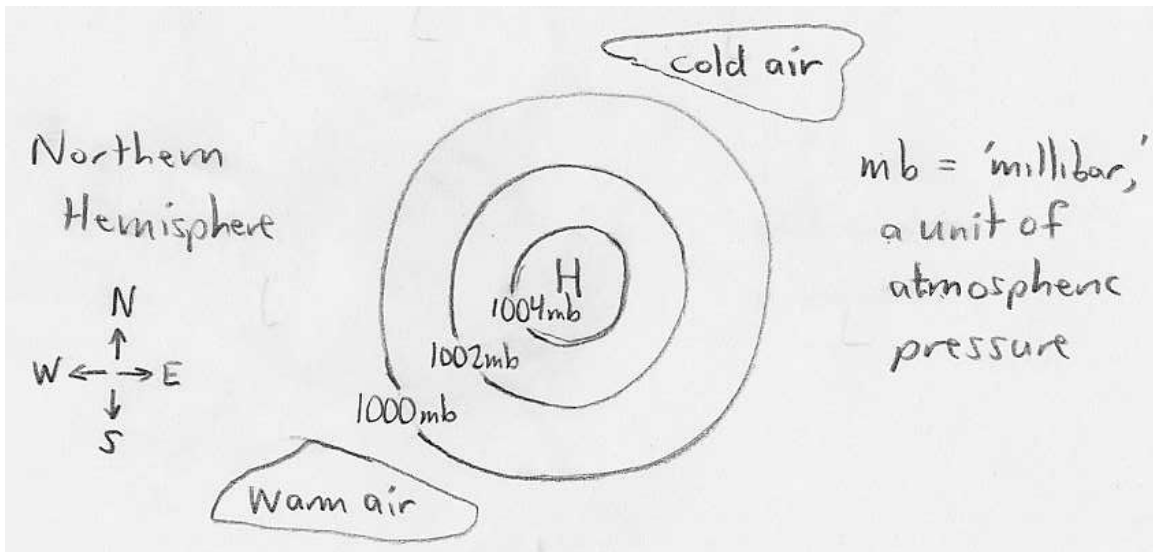


Name:

**NATS101 section 16: Introduction to Global Change
Activity #5: Atmosphere and Ocean circulation**

- 1. All together** Schematically draw with arrows the geostrophic force balance and the wind direction in the following diagram of a high pressure system in the Northern Hemisphere. In geostrophic balance the pressure gradient force is balanced by the Coriolis force. Also show the direction of air flow.



- 2. On your own** Suppose as drawn there is warm air to the southwest of the high pressure system, and cold air to the northeast of the high pressure system. Given the wind direction about the high pressure system, how will the system help reduce the south-north contrast in temperatures?