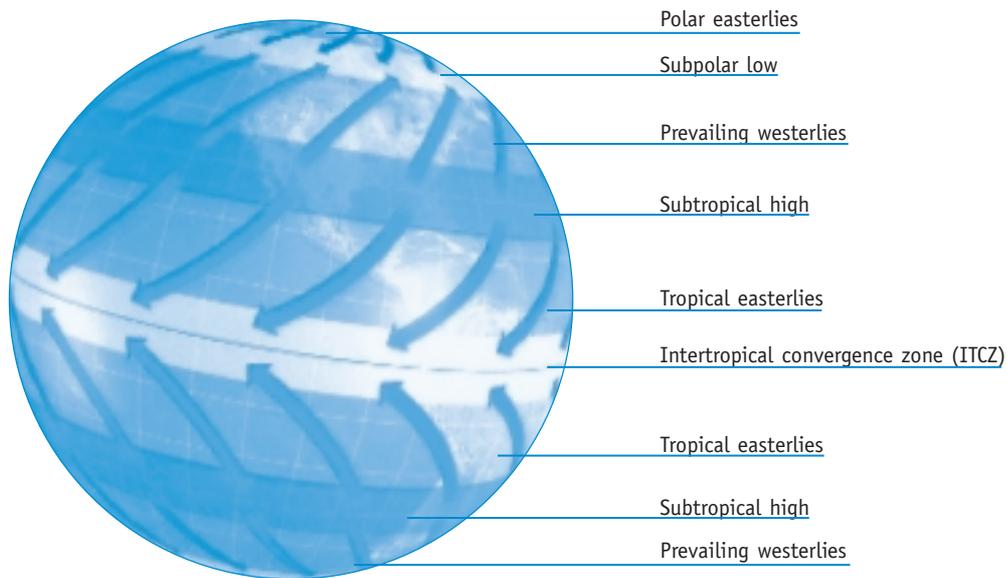


Name \_\_\_\_\_

Form \_\_\_\_\_

# PLANET EARTH PRECIPITATION PREVAILING WINDS

3. Describe this model of the global wind circulation in your own words. The questions in the box will help you.



1. Where are areas of high and low pressures?
2. Why are there such enormous differences? Keep the effect of the Sun on the equator and the polar regions in mind.
3. In what direction do most winds on our planet blow?
4. Why do winds that originally are south westerly winds on the Northern hemisphere become westerly winds?  
Think of the Coriolis Force!

4. In the film you can watch the damage typhoons may cause in a country like Bangla Desh.

What are these damages? Where are typhoons or hurricanes born? Why? Find your answers in the following text:

**Hurricanes... What are they?**

Hurricanes are tropical cyclones with winds that reach constant speeds of 75 miles per hour or more, and blow in a large spiral around a relatively calm centre – the eye of the hurricane. Every year, these violent storms bring destruction to coastlines and islands in their erratic path. Hurricanes are giant whirlwinds in which air moves in a large tightening spiral around a centre of extreme low pressure, extending outward 20 or 30 miles from the rim of the eye. This circulation is counter clockwise in the Northern Hemisphere and clockwise in the Southern Hemisphere. Near the centre, hurricane winds may gust to more than 200 miles per hour. The entire storm dominates the ocean surface and lower atmosphere over tens of thousands of square miles. Hurricane winds do much damage, but drowning is the greatest cause of hurricane deaths. As the storm approaches and moves across the coastline, it brings huge waves and storm tides that may reach 25 feet or more above normal. The rise may come rapidly, flooding coastal lowlands. Waves and currents erode beaches and barrier islands, undermine structures and wash out highway and railroad beds. The accompanying torrential rains produce sudden flooding as the storm moves inland. As its winds diminish, rainfall floods constitute the hurricane's greatest threat. The hurricanes that strike the eastern United States are born in the tropical and subtropical North Atlantic Ocean, the Caribbean Sea and the Gulf of Mexico. The storms move forward very slowly in the tropics, (usually 15 mph, or less), and may remain almost stationary for short periods of time. Then, as the hurricane moves farther from the Equator, its forward speed tends to increase; at middle latitudes it may exceed 50 miles per hour in extreme cases. The storms are driven by the heat released by condensing water vapour, and by external mechanical forces. Once cut off from the warm ocean, it begins to die.