**Wind, Jet Stream & Local Winds**

**Wind**

* **The movement of air caused by differences in air pressure is wind.**
* **Differences in air pressure are caused by uneven heating of the Earth.**
* **Pressure differences cause air to move between the equator and the poles.**

**Jet Stream**

* **A narrow belt of strong winds that blow in the upper troposphere and lower stratosphere.**
* **Can reach maximum speeds of 400 km/h**
* **Jet streams do not follow regular paths.**
* **Jet streams affect the movement of storms and help pilots fly.**

**Local Winds**

* **Local winds move short distances and blow from any direction.**
* **Sea and Land Breezes**
  + **During the day, air over the ocean is cooler and forms an area of high pressure.**
    - **The cool air flows from the ocean toward the land producing a sea breeze.**
  + **At night, air over the land is cooler and forms an area of high pressure.**
    - **The cool air moves from the land toward the ocean, producing a land breeze.**
* **Mountain and Valley Breezes**
  + **During the day, the air warms and warm air rises up the mountain slopes, creating a valley breeze.**
  + **At nightfall, the air cools and the cool air moves down the slopes into the valley, producing a mountain breeze.**

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