

AS: Checklist for Atmosphere and Weather Topic

Checklist for revision	Understand and know it	Need more revision	Do not understand- Must revise
I know how the basic structure of the earth's atmosphere			
I understand how the global energy budget works			
I understand the terms insolation, scattering, long wave radiation, short wave radiation, albedo, convection, conduction, sensible heat transfer and latent heat transfer			
I know what the day time energy budget is and could draw an annotated diagram of this.			
I know what the night time energy budget is and could draw an annotated diagram of this.			
I can explain the formation of weather phenomena associated with local energy budgets (mist, fog, dew, temperature inversions, land and sea breezes)			
I understand the latitudinal pattern of radiation excesses and deficits			
I know how heat is transferred from the equatorial regions to the poles			
I know what air pressure is and understand the terms high and low air pressure			
I can describe the tri-cell model of circulation and understand how it affects air pressure at various places on the globe			
I can explain how the tri-cell circulation model impacts wind movement across the globe			
I can name the main air pressure zones across the globe			
I can name the main global winds			
I know how air pressure and wind movement can change seasonally			
I know what Jet Streams and Rossby waves are and could explain how they impact on our atmosphere			
I can explain how the following factors affect global climate; latitude, altitude, distance from the sea and ocean currents			
I know the three states in which moisture can be found in the atmosphere and understand the terms condensation, evaporation, sublimation, freezing and melting			
I know what an adiabatic process is and can describe the terms SALR, ELR and DALR			
I can explain the difference between stability and instability			
I can draw an annotated diagram to explain relief, convectional and frontal rainfall			
I understand how thunderstorms, frost, hail and snow are formed			
I can name, describe and identify various cloud types			
I know the difference between the greenhouse effect and global warming			
I can explain why global warming occurs			
I can describe possible impacts of global warming and their location			
I know the impact that urban areas have on climate and why			