Runoff, hydrographs and changes in the water cycle over time *3.1.1.2*

Q1	***True or False?***	
A	Runoff depends entirely on the level of precipitation	
B	The velocity of runoff is affected by the gradient of land	
C	The same soil can vary in terms of its infiltration capacity at different times	
D	It's not just the amount of rainfall but its distribution which affects runoff	
E	A flood hydrograph predicts when a river will flood	

Q2	**Match each term to the correct description**	
A	The entire area from which a drop of rainfall eventually reaches a river	
B	Number of hours between maximum rainfall and peak river discharge	
C	The shape of the land surface	
D	Rock quality permitting water to flow through it by means of fissures & joints	
E	Standard level of water in a river	

Select from: **Topography** **Base flow** **Lag time** **Drainage basin** **Pervious**

Q3	**Tick which is the odd one out from each group of 6 terms**	
A	Drizzle	Hail
	Sleet	Evaporation
	Snow	Rain
B	Rising limb	Base flow
	Peak discharge	Falling limb
	Infiltration	Lag time
C	Confluence	Drainage pattern
	Watershed	Source
	Tributary	Impermeable rock
D	Flooding	Water vapour
	Precipitation	Evaporation
	Condensation	Solar energy
E	Permeable	Pervious
	Evapotranspiration	Porous
	Impervious	Infiltration capacity

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Q4	**Decide which factors will lead to a long lag time/small peak discharge flood hydrograph and which will result in a short lag time/high peak discharge flood hydrograph**

Long lag time / small peak discharge	***Short lag time / high peak discharge***

Impermeable surface **Intense prolonged rain** **Small river basin**

Steep topography **Long drought before rainfall** **Urban growth on farmland**

Deep soil layer **Porous rock** **Rapid snow melt** **Afforestation**

Q5	***Suggest ways in which human activity can affect the hydrological cycle over time***
A	Amplifying the hydrological cycle
B	Reducing the hydrological cycle