AN ENQUIRY INTO THE RIVER CHESS

I am using skills of …		BLOOM calls this 	Which involves	In essence	Question types and suitable activities	
					Water ecology focus	**Sustainable water management focus**
Judgement and empathy		**Evaluation**	Critically examining information, making a judgement & justifying my opinion or understanding the opinions of others	Balanced arguments	Design an NEA project to assess the health of the River Chess.	Present a plan for sustainable water management in the R. Chess catchment which meets the needs of the present whilst safeguarding the needs of the future.
Planning and prediction		**Synthesis**	Putting new info & old info together	Creating	How do we know if the River Chess is healthy? Or Explain this statement *'I want to see water voles back, I want to see brown trout back and I want to see water cress back in production. It's simple!* 'Paul Jennings of the River Chess Assn, July 2019	Use SWOT analysis to present a report comparing the views of 6 different stakeholders on the River Chess.
Investigating		**Analysis**	Taking information apart, exploring relationships between factors	Unpicking	Choose two water observations from this list • pH • Dissolved oxygen • turbidity • Chlorophyll-a • Tryptophan • Electro conductivity • Water level / discharge Demonstrate an understanding of what is being measured Show the relationship between the factors	What are the main factors determining flow levels in the River Chess? Include both physical and human factors

					Or Design a leaflet explaining the optimal conditions for a healthy brown trout population including reference to • pH • Dissolved oxygen • turbidity • Chlorophyll-a • Tryptophan • Electro conductivity • Water level / discharge	
Simple problem solving		**Application**	Using information in a new situation	Demonstrating how you can use data and skills	Drawing hydrographs Interpreting hydrographs Using Spearmans Rank to correlate groundwater and river discharge data	
Understanding		**Comprehension**	Making sense out of information	Explaining	Draw and annotate a diagram showing the factors controlling aquifer recharge and aquifer discharge	For River Chess catchment summarise the main reasons for rising water demand and falling water supply in recent years
Remembering		**Knowledge**	Recall	Facts	• 77% of chalk streams found to be below a good standard of health in 2014 • The chalk hydrological cycle has unique features • River Chess is in the Chilterns • River Chess is suffering from over abstraction, low flows, pollution and invasive species • Successful management involves holistic approach to problems called integrated catchment management	

Key					
	Teacher notes provided		Stimulus materials provided		Useful weblinks for student research