River Health: Numeracy	P5-7 (Differentiated for phases 6-9)
Pupils use maths to calculate how healthy or unhealthy two rivers are, using a simplified version of biotic indexes which are used by conservationists to assess water quality. Pupils use addition and multiplication skills.	
MNU 2-03a MNU 2-03b MNU 2-07a	**Extension Activities:** Research and create artwork or an acrostic poem on some of the named organisms found in rivers (search the name of the species, or use the RSPB/wildlife trust websites) If there is a safe stream or pond nearby, pupils can pond dip e.g. https://scottishwildlifetrust.org.uk/resource/have-a-go-at-pond-dipping/ Research how water quality can be affected and what we can do to help, e.g. https://earthwatch.org.uk/blog/water-pollution-in-the-uk-the-causes-and-effects/
Learning Outcomes/Intentions **We are learning to use mental and written strategies to solve problems.** I can find the numbers I need in the table, list, or graph. I can multiply numbers correctly. I can say what my answer means in the real-world situation.	
Key words Water quality Pollution	

Timings	Desc	Notes
15 mins	Use the short powerpoint to introduce the idea of river health and how people use maths to understand its health.	
10 mins	Recap of DNK strategies for pupils to use	
45 mins	Work through worksheets	Teachers can alter the pollution score and number found for harder/easier problems.
10 mins	Plenary – go over the answers and success criteria. Which river was healthier?	