LI to select numbers from a table and multiply them.

Success Criteria	Self-assess
I can find the numbers I need in the table.	
I can multiply them correctly.	
I can say what my answer means in the real-world situation.	

River Health

Each invertebrate is given a score based on how well it can survive pollution

Olivia is a scientist who studies rivers. She is investigating how healthy two rivers are by looking at the invertebrates living within them.

- **Animals that live only in clean water = high score**
- **Animals that can live in dirty, polluted water = low score**

Now, let's use the table below to work out how healthy the river is:

1) **Multiply**: Take each animal's pollution score and multiply it by how many were found.
2) **Write it down**: Fill in the last column with your answers.
3) **Add it up**: Add up all the numbers in the number found column and in the last column
4) **Match your answer** to the water quality scale below to see how healthy or unhealthy the river is.

Water Quality scale:

River Health	0 – 1.9	2 – 3.9	4 – 5.9	6 – 7.9	8-10
Water Quality	Very Poor	Poor	Moderate	Good	Very Good

LI to select numbers from a table and multiply them.

River Nith

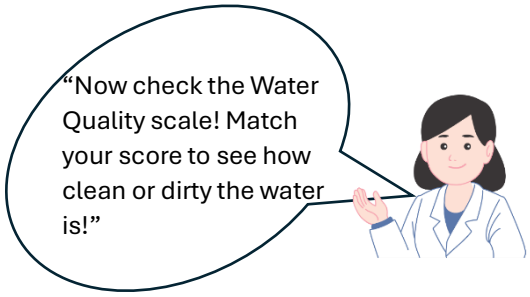
Invertebrate	Pollution score	Number found in River	Total
Freshwater Shrimp 	5	3	**5 x 3 = 15**
Water Louse 	3	5	
Limpet 	8	4	
Snail 	3	7	
Beetle 	4	2	
Worm 	1	9	
	Total		

Now, let's work out the river's health score

1) Add up all the **"Number Found"** to get the total animals =

2) Add up all the **"Total Scores"** from the last column =

3) Divide the total score by the total number of animals for **River Health Score** =



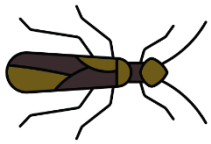
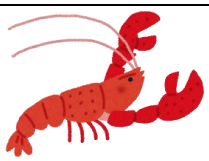
4. What is the river Nith's Water Quality value? =

LI to select numbers from a table and multiply them.

Compare with the River Dee

Repeat the same steps for the River Dee table

River Dee

Invertebrate	Pollution score	Number found in river	Total
Stonefly larvae 	9	3	
Pond Skater 	5	9	
Freshwater Crayfish 	10	9	
Cased caddisfly larvae 	7	2	
		Total =	

1. What is the river health score? (Remember: divide the total score by the total number of animals) =
2. What is the water quality value? (use the scale above) =
3. The heathiest river =