

Combined Science - Chemistry - Key Stage 4

C10 Using Resources

## **Required practical on potable water**

Miss Offer



## Independent task – interpreting results

	<b>pH</b>	<b>Mass of solids dissolved in 10 cm<sup>3</sup></b>
Sea water	8.20	0.60 g
Tap water	7.70	0.01 g
River water	7.40	0.40 g

1. Which of the samples has an alkaline pH?
2. Which of the samples has a neutral pH?
3. Compare the mass of solids dissolved in 10 cm<sup>3</sup> of the three samples.



# Independent practise

$$\text{Concentration (g/dm}^3\text{)} = \frac{\text{amount of solute (g)}}{\text{volume of solution (cm}^3\text{)}} \times 1000$$

	<b>Mass of solids dissolved in 10 cm<sup>3</sup></b>
Sea water	0.60 g
Tap water	0.01 g
River water	0.40 g

1. What is the concentration of tap water?
2. What is the concentration of river water?



# Independent task – recall questions

## Answer the following questions:

1. What are the 3 ways in which pH can be measured?
2. Why is using a pH meter the best way to measure pH?
3. What pH range do alkalis have?
4. What is the state change called when a gas turns into a liquid?
5. Why is distillation not often used to produce potable water from sea water?
6. How do you calculate the concentration of dissolved solids in a water sample?

