

Lesson 5.7 Acid rain

LESSON PLAN

Book	Learning objectives: strands 2–5	Learning objectives: strand 1 (HSW)	PLTS
5.7 pp. 66–67	<ul style="list-style-type: none"> describe the causes of acid rain 	<ul style="list-style-type: none"> recognise how decisions about the use of science impact on people and the environment describe patterns and trends in primary and secondary data and link these to conclusions drawn 	<ul style="list-style-type: none"> Independent enquirers: analyse and evaluate information, judging its relevance and value

Activities	Differentiation	Resources provided
<p>Starter</p> <ul style="list-style-type: none"> Activity 1 What do we know about acid rain? – A structured thinking activity to elicit prior knowledge of acid rain. Use the 'Think, pair, share' template. 		<p>Teacher & Technician Notes 5.7</p> <ul style="list-style-type: none"> Template 1
<p>Main</p> <ul style="list-style-type: none"> PowerPoint Acid rain – Summarising students' ideas on what causes acid rain and the problems associated with it. Activity 2 Acid rain: the evidence – Students test samples from lakes from different countries and relate it to data on how much acid pollution each country produces. 	<p>Help</p> <ul style="list-style-type: none"> Activity 2 Help sheet <p>Extension</p> <ul style="list-style-type: none"> Extension questions at end of Core sheet 	<ul style="list-style-type: none"> PowerPoint Activity 2 Activity sheet Help sheet
<p>Plenary</p> <ul style="list-style-type: none"> Each student to write a suggestion on how to reduce acidic pollution or return lakes affected back to their 'normal pH'. 		

Learning outcomes				
<p>Level 3</p> <ul style="list-style-type: none"> Use straightforward scientific evidence to answer a question Identify straightforward patterns in the data presented 	<p>Level 4</p> <ul style="list-style-type: none"> Identify patterns in data and draw a straightforward conclusion Relate their conclusion to scientific knowledge and understanding 	<p>Level 5</p> <ul style="list-style-type: none"> Identify inconsistencies in data from different sources 	<p>Level 6</p> <ul style="list-style-type: none"> Suggest a reason for an inconsistency in data from different sources, using their scientific knowledge and understanding about acids 	<p>Level 7</p> <ul style="list-style-type: none"> Identify limitations in the primary of secondary data Decide whether the data is sufficient to support the conclusions drawn

Homework	Key words
<ul style="list-style-type: none"> Write a report to go on a government website giving recommendations for different countries on what they need to do about acid rain. 	acid rain, conclusion, analyse, data, evidence