



Geography



We are Air Quality Officers

ASSESSED PIECE OF WORK

Chesswood Y3 Geography — We are Air Quality Officers



Key Knowledge

What I Should Already Know

- Countries of the UK (Key Stage 1)
- 4 points of the compass (ks2)
- Types of Settlements (Ks2)

To do

What is an Air Quality Officer?

Someone who carries out air quality surveys, looks out for possible risks and seeks strategies for overcoming these, striving for high quality of air in our cities and towns.

Key Vocabulary

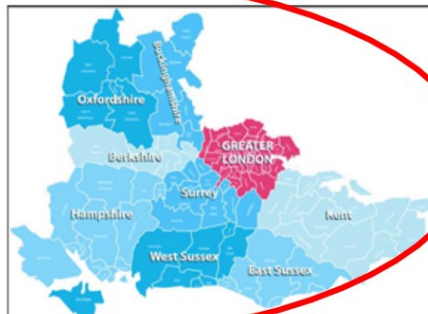
Word	Definition
Site	The piece of land a settlement is built on.
National	Relating to a country
Regional	Relating to a region (part) of a country
Local	Relating to a particular area or your own neighbourhood
Regions	Large areas of the country
County	Smaller areas of the country with its own government offices
Capital City	Is where the local government of a country is. The leaders work in the capital city.
Pollution	Pollution is anything that makes the earth dirty and unhealthy. Land, air, and water are all affected by pollution
Air Quality	a measure of how clean or dirty the air in a particular area is.
Air pollution	Is when unwanted chemicals, gases and particles enter the air causing harm to animals and damaging the natural cycles of the Earth
Traffic	Vehicles (cars, buses, motorbikes etc moving along a road)
environment	The natural world, with the plants and animals living in it.
sustainability	Sustainability is the practice of using natural resources responsibly, so they can support both present and future generations
urban	Relating to a city or town (housing, factories, offices, roads and footpaths)
Green urban	An area in a town or city which covered with grass or other trees (park or woodland.)

The 9 regions of England. Worthing is located in the South East.

Regions are divided further into counties.

The counties of the South East of England are West Sussex, East Sussex, Kent, Surrey, Hampshire, Surrey, Berkshire, Oxfordshire, Buckinghamshire and Greater London (9)

Worthing is in West Sussex. Counties around West Sussex—east is East Sussex, west is Hampshire, north is Surrey and to the south is the English Channel.



Sustainability

Towns and cities will have problems with pollution because there are lots of people living in a small area.

Traffic is the main producer of air pollution in cities.

Solutions to air pollution in cities include: green public transport, charging stations for electric cars, bicycle lanes, congestion charges and low emission zones.



This is the knowledge organiser for the topic.
Your teacher will give you a copy to stick into your book

Y3 Geography — We are Air Quality Officers

Key Skills



Fieldwork Skills

Pupils to consider the problem of air pollution on Chesswood Road by counting

the amount of traffic over a 10 minute period using a tally chart and creating a block graph or bar chart to present the data.

On the OS map showing Brighton Road (Splashpoint) and Chesswood Road, we can see that Brighton Road is a main road and Chesswood Road is a minor road. This means that Brighton Road is busier with more traffic than Chesswood Road.

Traffic Survey and Block Diagrams Activity

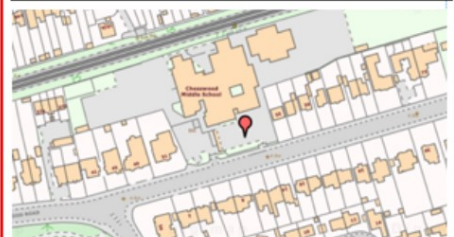
Name: _____ Date: _____				
Car	Bus	Tram	Motorcycle	Bicycle
Tally				
Total				

10	Question: 1. Which car is the best? 2. Which car is the poorest? 3. How many of each type? 4. What is the difference between the greatest and least?
9	
8	
7	
6	
5	
4	
3	
2	
1	
0	

Fieldwork

Pollution Problems

- Location: From front playground/footpath



Map Skills



Worthing 1890s



Worthing 1950s



Worthing 2000s

Car Pollution Investigation

Pupils to collect data (how many pedestrians, cyclists, vans, cars, lorries, buses and motorbikes) for 10mins.

Key Ordnance Survey Symbols

- Single carriageway main road
- Secondary road
- Minor road over 4m wide
- Minor road under 4m wide

Worthing has increased in sized since the 1890s. Then most of the town was **south** of the railway line and was only starting to reach **West** Worthing. By the 1950s, the town had grown to the **north** and by the 2000s, Durrington is also providing housing for a larger population.

Recap key knowledge

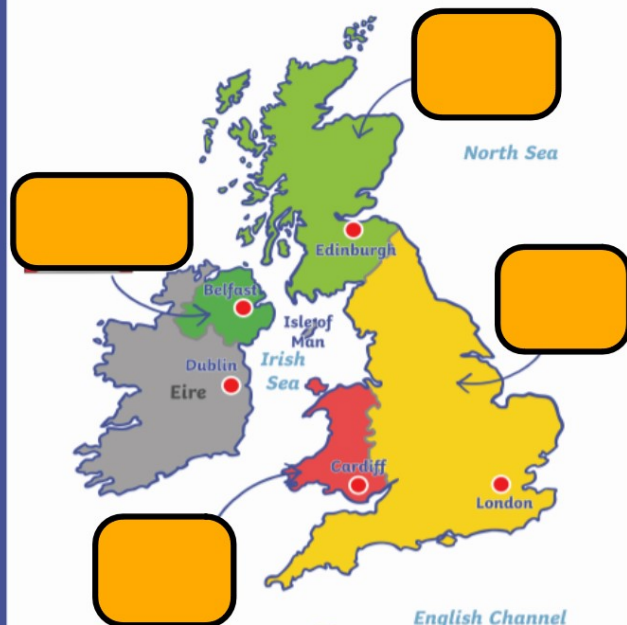
What I Should Already Know

- Countries of the UK (Key Stage 1)
- 4 points of the compass (ks2)
- Types of Settlements (Ks2)

Which countries form the United Kingdom?

The United Kingdom

The United Kingdom is made up of Northern Ireland, England, Scotland and Wales.



Answers

What I Should Already Know

- Countries of the UK (Key Stage 1)
- 4 points of the compass (ks2)
- Types of Settlements (Ks2)

Did you get them all correct?

Which countries form the United Kingdom?



Recap key knowledge

Which county do we live in?



Answers

Which county do we live in?



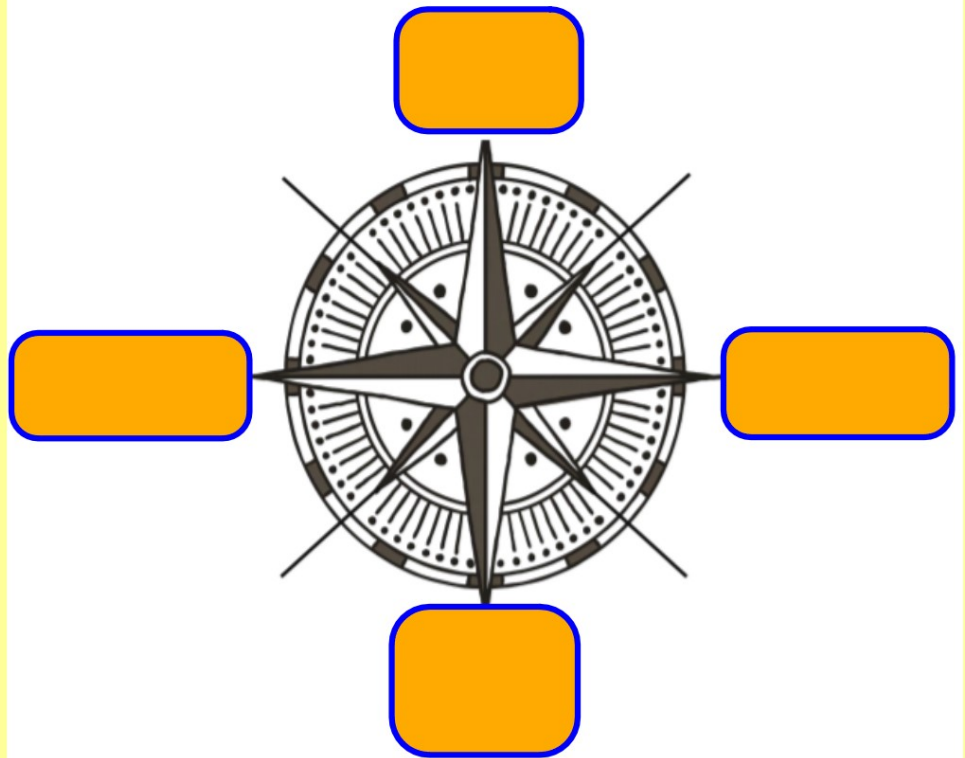
Recap key knowledge

What I Should Already Know

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Compass Labelling Activity

Label the four points of the compass.



Answers

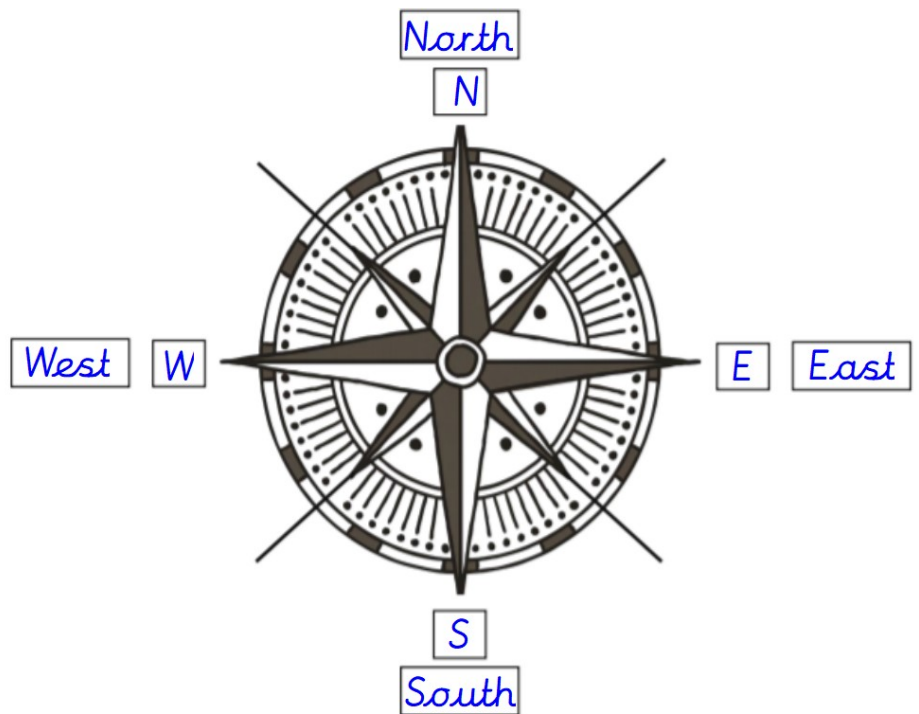
What I Should Already Know

- Countries of the UK (Key Stage 1)
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*Did you get them
all correct?*

Compass Labelling Activity

Label the four points of the compass.



Recap key knowledge

Which town do we live in?



Can you find Chesswood Junior School on either map?

point to where you believe we are located

OS map



Aerial photo



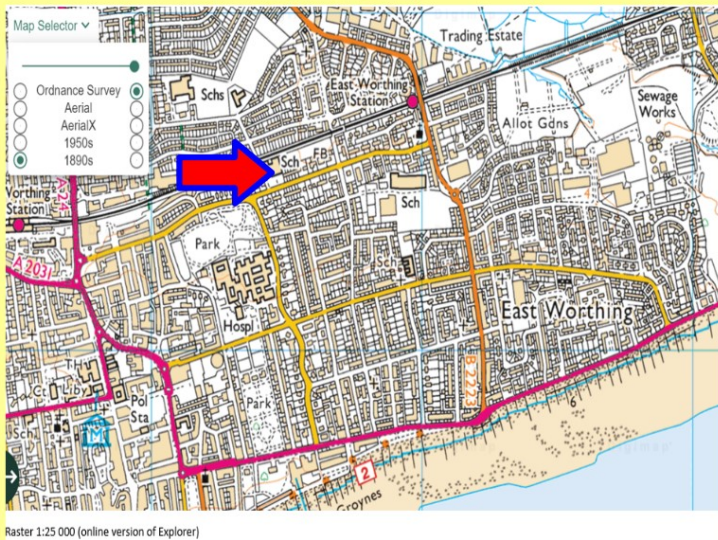
Answers

Which town do we live in?

Worthing

Can you find Chesswood Junior School on either map?

OS map



Aerial photo



Recap key knowledge

What I Should Already Know

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What is a settlement?

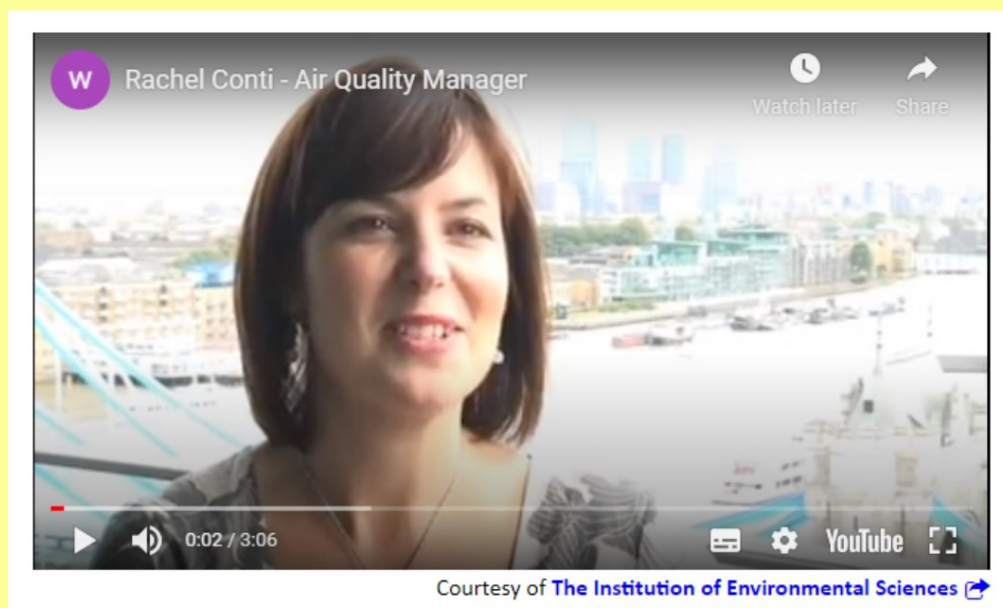
During the Autumn term we looked at different settlement types, can you name all four of these?





Watch this video to see what an Air Quality Manager does in their job role

Now that we know what an Air Quality Manager does, it is time for us to think like one!





Pollution

Pollution is when gases, smoke and chemicals are introduced to, and damage, the environment.

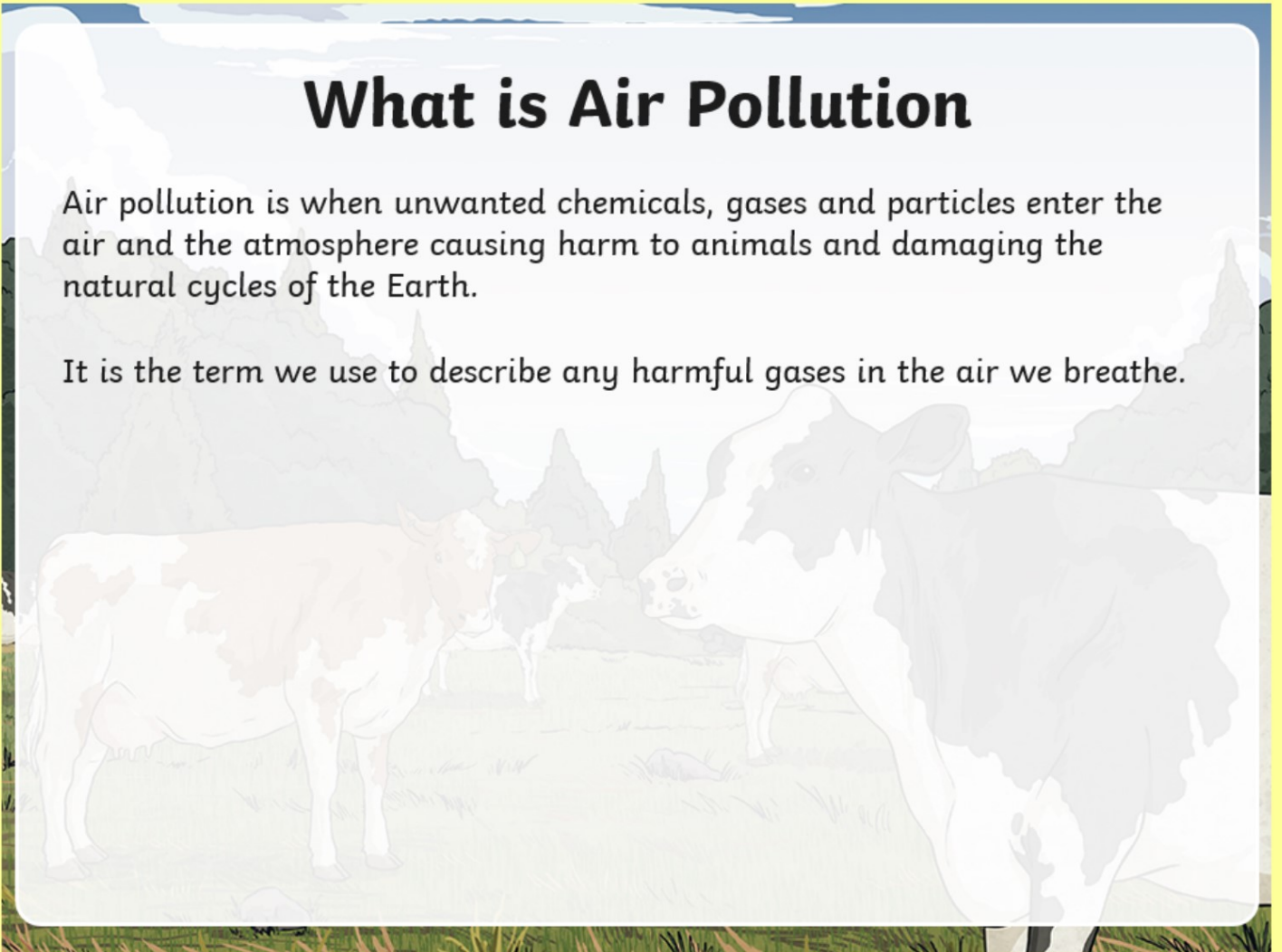
In recent times, there has been growing concern about the health implications of **air pollution** on humans, animals and plants.



What is Air Pollution

Air pollution is when unwanted chemicals, gases and particles enter the air and the atmosphere causing harm to animals and damaging the natural cycles of the Earth.

It is the term we use to describe any harmful gases in the air we breathe.



What Causes Air Pollution

There are 5 main types of pollution, they are:

Transport

e.g. cars burning engine fuels, especially diesel from the exhaust pipe.

Agricultural

methane gas given off by cattle and the burning of animal waste.

Household

the burning of fossil fuels to heat homes and cook food.

Industrial

the burning of fuels to power the factories and machines.

Waste

plastic products release dangerous chemicals, even if they are not burned.

How Does Air Pollution Affect Us?

Health: Humans depend on air to live and breathe. Breathing in polluted air puts you at a higher risk of developing respiratory diseases.

Vegetation: The harmful substances that are released into the air settle on plants and in water sources. Animals eat the contaminated plants and drink the dirty water which means that the chemicals also reach us through the food chain.

Buildings: in large amounts some of these gases can damage buildings.

ASSESSED PIECE OF WORK

Which type of settlements do you think will have the greatest problems with pollution?

Create a poster to show your chosen settlement and what is causing the pollution.



A hamlet



A town



A city



A village