

Hobbs Hill Wood Primary School

Knowledge Organiser for
Year 4 – Autumn 2,
Computing,
We are meteorologists



'Inspiring confident and independent learners'

Knowledge Organiser

Knowledge

- To understand different measurement techniques for weather, both analogue and digital
- To use computer-based data logging to automate the recording of some weather data
- To use spreadsheets to create charts
- To analyse data, explore inconsistencies in data and make predictions
- To know and understand how to enter data
- To understand what a digital photo is
- To know and understand what a prediction is
- To know and understand what a weather forecast is

Key Vocabulary:

Cup anemometer – a device for measuring wind speed in which hemispherical cups rotate about a shaft, the speed of the rotation being proportional to the wind speed.

Interface – The link between one system and another, typically between the user of a program and the computer on which it runs.

Forecast – a prediction or estimate

Weather forecast – a prediction or estimate of the weather

Prediction – a logical and well thought through guess



Thermometer



Rain gauge



Digital weather station



Barometer



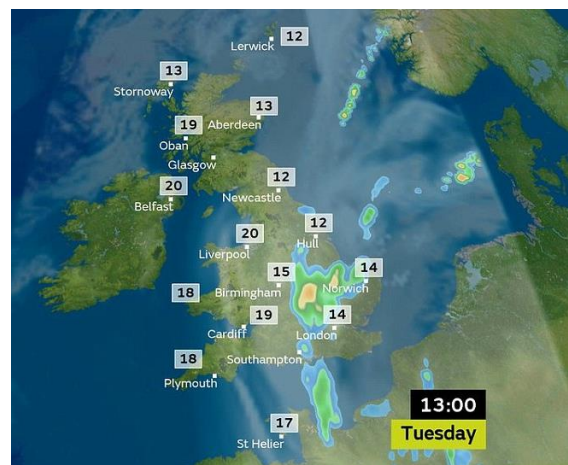
Anemometer



Digital thermometer

Skills

- To use weather measurement equipment safely
- To be able to enter data
- To take digital photos
- To be able to create simple charts
- To create a presentation for their weather forecast
- To use weather measurement equipment accurately
- To accurately describe the weather
- Be able to make sensible predictions
- To add measurements and descriptions to photographs
- To present the weather effectively to their peers
- Use a variety of software (including internet services) to create content including presenting information.
- Be able to use technology safely, respectfully and responsibly;
- Be able to recognise acceptable/unacceptable behaviour; Know a range of ways to report concerns about content and contact.



Hobbs Hill Wood Primary School

Knowledge Organiser for
Geography, Year 4, Europe



'Inspiring confident and independent learners'

Knowledge Organiser for

Knowledge

- Where is Europe? Identify the countries that made up Europe.
- Explore capitals cities and landmarks, understand key features of countries.
- To investigate and compare climates in Europe.
- To explore and understand the geographical features of Europe- rivers, mountains, volcanoes, earthquakes and population ect.
- To understand key aspects of human geography including: economic activity including trade links, and the distribution of natural resources including energy, food, minerals and water
- Understand geographical similarities and differences through the study of human and physical geography of the United Kingdom and a region within Europe.
- To research the human and physical features of a particular European country. Deepen an understanding of the interaction between physical and human processes.



Skills

- Use maps to locate and describe countries, focusing on Europe (including Russia), concentrating on their environmental regions, major cities and key physical and human characteristics.
- Describe and understand key aspects of physical geography, including climate zones, biomes, volcanoes, rivers and mountains.
- Name and locate cities of the United Kingdom and Europe.
- Describe and understand key aspects of human geography, including economic activity, trade links, land use, types of settlement and the distribution of natural and energy resources (including food and energy).
- Identify the position and significance of the Arctic Circle.
- Understand geographical similarities and differences by studying the human geography of a region in a European country.

Key Vocabulary

climate	Condition of temp/wind/rain and heat.
Capital city	City or town which is the seat of government
city	A large town
equator	A line dividing the earth into northern and southern hemisphere.
international	Carried out between two or more countries or nations.
mountains	A large natural elevation of the earth's surface.
nationality	Belonging to a certain country or nation.
ocean	Very large expanse of sea.
population	All inhabitants of a particular place.
tropical	Hot humid conditions
vegetation	Plants found in a given area.
weather	State of atmosphere at a particular place.

Hobbs Hill Wood Primary School

Knowledge Organiser for PSHE, Year 4, Celebrating Difference



'Inspiring confident and independent learners'

Knowledge Organiser

Knowledge

- Know that sometimes people make assumptions about a person because of the way they look or act
- Know there are influences that can affect how we judge a person or situation
- Know that some forms of bullying are harder to identify e.g. tactical ignoring, cyber-bullying
- Know what to do if they think bullying is, or might be taking place
- Know the reasons why witnesses sometimes join in with bullying and don't tell anyone
- Know that first impressions can change.

Key Vocabulary

Character, Assumption, Judgement, Surprised, Different, Appearance, Accept, Influence, Opinion, Attitude, Bullying, Friend, Secret, Deliberate, On purpose, Bystander, Witness, Bully, Problem solve, Cyber bullying, Text message, Website, Troll, Special, Unique, Physical features, Impression, Changed.



Skills

- Try to accept people for who they are
- Identify influences that have made them think or feel positively/negatively about a situation
- Identify feelings that a bystander might feel in a bullying situation
- Identify reasons why a bystander might join in with bullying
- Revisit the 'Solve it together' technique to practise conflict and bullying scenarios
- Identify their own uniqueness
- Be comfortable with the way they look
- Identify when a first impression they had was right or wrong
- Be non-judgemental about others who are different



Knowledge Organiser for Science

Year 4- Looking at states

Knowledge

- Children will learn about states of matter.
- Compare and group materials together, according to whether they are solids, liquids or gases.
- Observe that some materials change state when they are heated or cooled, and measure or research the temperature at which this happens in degrees Celsius ($^{\circ}\text{C}$).
- Understand whether changes are reversible or not
- Understand how ice is made and that it is a reversal change of state
- Understand how different chocolates melt and why
- Identify the part played by evaporation and condensation in the water cycle and associate the rate of evaporation with temperature.

Key Vocabulary:

Boiling: when a material reaches a temperature when it bubbles and turns into a gas rapidly

Condensing: the process when a gas turns into a liquid

Evaporation: when a liquid turns into a gas, below its boiling point

freezing: when a liquid turns into a solid

Gas: a state of a material when it fills the entire space available

Liquid: a state of a material when it can flow from one place to another, and can be poured

Matter: another name for 'material'

Melting: when a solid turns into a liquid

Solid: a state of a material when it cannot change shape, but holds the shape of whatever container it was frozen in

Water cycle: how water moves around to create clouds, rain and the weather

Skills

- Ask relevant questions and use different types of scientific enquiries to answer them.
- Set up simple practical enquiries, comparative and fair tests.
- Make systematic and careful observations and, where appropriate, taking accurate measurements using standard units, using a range of equipment, including thermometers and data loggers.
- Gather, record, classify and present data in a variety of ways to help in answering questions.
- Record findings using simple scientific language, drawings, labelled diagrams, keys, bar charts, and tables.
- Report on findings from enquiries, including oral and written explanations, displays or presentations of results and conclusions.
- Use results to draw simple conclusions, make predictions for new values, suggest improvements and raise further questions.
- Identify differences, similarities or changes related to simple scientific ideas and processes.
- Use straightforward scientific evidence to answer questions or to support their findings.

