

Hobbs Hill Wood Primary School

Knowledge Organiser for
Science

Autumn, Year 6

Electricity; Evolution and Inheritance



'Inspiring confident and independent learners'

Knowledge

Electricity

- Associate the brightness of a lamp or the volume of a buzzer with the number and voltage of cells used in a circuit
- Compare and give reasons for variations in how components function, including the brightness of bulbs, the loudness of buzzers and the on/off position of switches
- Use recognised symbols when representing a simple circuit in a diagram

Core vocabulary:

Battery, buzzer, cell, complete, component, electrons, filament, fuse, switch

Evolution and Inheritance

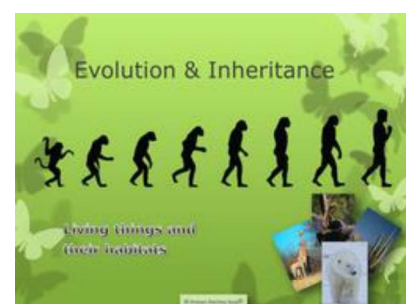
- Recognise that living things have changed over time and that fossils provide information about living things that inhabited the Earth millions of years ago
- Recognise that living things produce offspring of the same kind, but normally offspring vary and are not identical to their parents
- Identify how animals and plants are adapted to suit their environment in different ways and that adaptation may lead to evolution
- Know that Charles Darwin could prove how animals evolved

Core vocabulary:

Adaptation, dinosaur, evolution, fossil, inherited, natural selection, prehistoric, variety

Skills

- Plan different types of scientific enquiries to answer questions
- Recognise and control variables where necessary
- Take measurements using a range of scientific equipment
- Take measurements with increasing accuracy and precision
- Take repeat readings when appropriate
- Record data and results of increasing complexity using scientific diagrams and labels
- Record data and results of increasing complexity using scientific diagrams and labels, classification keys, tables and bar charts
- Record data and results of increasing complexity using line graphs
- Report and present findings from enquiries, including conclusions and causal relationships
- Report and presents findings from enquiries in oral and written forms such as displays and other presentation
- Report and present findings from enquiries, including explanations of, and degree of, trust in results



Hobbs Hill Wood Primary School

Knowledge Organiser for

RE

Year 6, Autumn, Spring and Summer

Buddhism and Christianity



'Inspiring confident and independent learners'

Knowledge

Christian and Buddhist Beliefs and Practices.

- Explore key Christian and Buddhist Beliefs. What do key Buddhist and Christian teaching (8 fold path and 10 commandments) tell believers how to live?

Symbols and actions

- How do Christians and Buddhists express their faith through symbols and festivals?

Christian and Buddhist Beliefs and Practices.

- Know stories of the lives of key religious people within Christianity and Buddhism, the significance of these in their own lives and in the lives of believers today
- Know about the significance of their own religious, cultural and family traditions and how these relate to the experiences of others
- Within Christianity and Buddhism, know about the way verbal and non- verbal symbolic expression and action are used to convey meaning, particularly in religious contexts, including sacred texts.

Symbols and actions

- How do Christians and Buddhists express their faith through symbols and festivals?

Ultimate questions

- Explore ideas about God from a range of religions including non-religious viewpoints. Why do we have different ideas about God? Does it matter?
- Human responsibility and values
- What is the relationship between humans, animals and the environment? What do religions and other groups have to say about the environment?

Human responsibility and values

- What is the relationship between humans, animals and the environment? What do religions and other groups have to say about the environment?

Skills

- Describe the key aspects of Christianity and Buddhism and traditions that influence the beliefs and values of others
- Identify and begin to describe the similarities and differences within and between Christianity and Buddhism
- To create the main events in the life of Buddha and Jesus
- To reflect on ideas of right and wrong and their own and others' responses to them. Recognise the influence of others within religions
- To use and interpret information about religions from a range of sources
- To recognise the need for reflection
- Form personal questions that derive from discussions about God
- To form their own point of view based on respectful discussions
- Explain personal beliefs regarding the environment or animals
- Be aware of what they are grateful for and reflect on positives

Key Vocabulary:

Buddhism, Buddhist, Buddha, Christianity, Christian, Jesus, Noble Eightfold Path, Ten Commandments, Rupa, Shrine, Loving, kindness, Compassion, Friendliness, Care, Non-violence, Wisdom, Advent, Virgin, Mary, Joseph, Angel, Gabriel, Jesus, Incarnation, Messiah, Christ, Saviour, Nazareth, Bethlehem, Shepherds, Kings, Carols

Hobbs Hill Wood Primary School

Knowledge Organiser for:

MFL - Spanish

Autumn, Year 6

EN EL COLEGIO – At School



'Inspiring confident and independent learners'

Knowledge

- Name the subjects we study in school in Spanish with the correct definite
- article/determiner.
- Extend sentences by giving an opinion on the various school subjects and extend even further by giving a justification for that subject.
- Know what time and on what day we study certain school subjects.

Core vocabulary:

En el colegioAt school

El español.... Spanish

El inglés..... English

El arte..... Art

La educación física P.E.

La música... Music

La geografía..... Geography

La historia.... History

Las matemáticas.... Maths

Las ciencias..... Science

La informática.... ICT

Qué te gusta?..... What do you like?

Te gusta...? Do you like...?

Me gusta... I like...

Me encanta... I love...

No me gusta... I do not like

Aburrido... Boring

Difícil.... Difficult

Interesante.... Interesting

Divertido..... Fun

Fácil..... Easy

Porque..... Because

Es It is

Porque es... Because it is...

Porque son... Because they are...

Y..... And

Pero..... But

Skills

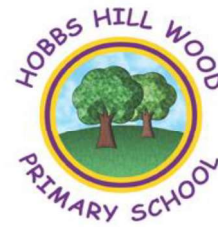
- To be able to provide positive and negative opinions and justifications to questions on school subjects and learn that these opinions and justifications are transferable
- Be able to say the time and day of each subject



Hobbs Hill Wood Primary School

Knowledge Organiser for:
Computing,
Year 6, Autumn

‘We are Toy Makers,’ and ‘Computational Thinkers.’



‘Inspiring confident and independent learners’

Knowledge

- Understand how computers use stored programs to connect input to output
- work with physical components of a system
- understand how algorithms are used to programme software
- understand sequence, selection and repetition in programs
- understand how some key algorithms can be expressed as programs
- understand common algorithms for searching and sorting a list

Core vocabulary:

Accelerometer, bluetooth, controller, edge connector, embedded system, input, interactive, light-emitting diode (LED), MakeCode, micro:bit, microprocessor, output, simulator, system, abstraction, algorithm, binary search, decomposition, divide and conquer, graph, greedy algorithm, linear search, quicksort, search algorithm, selection sort



Skills

- Generate and evaluate designs in response to a brief
- plan a complex project by decomposing it into smaller parts
- design and write a program for an embedded system
- program the micro:bit to control their toy
- identify problems with their toy
- identify bugs in their program.
- use commands to display text on screen, accept typed user input, store and retrieve data using variables and select from a list
- reason logically about algorithms
- appreciate the effect of different algorithmic approaches to problems in mathematics.



Hobbs Hill Wood Primary School

Knowledge Organiser for

PE

Year 6

Tennis



'Inspiring confident and independent learners'

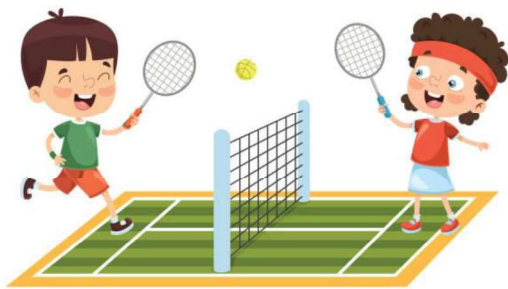
Tennis

National curriculum aims

2A- Use running, jumping, throwing and catching in isolation and in combination.

2B- Play competitive games, modified where appropriate, and apply basic principles suitable for attacking and defending.

2F- Compare their performance with previous ones and demonstrate improvement to achieve their personal best.



Skills

- Hit the ball with purpose, varying in speed, height and direction.
- Direct the ball towards the opponent's court or target areas.
- Perform skills such as forehand and backhand shots with control and confidence.
- Play shots on the forehand and backhand side of your body.
- Direct the ball towards the opponent's court or target area.
- Participate in competitive games, modified where appropriate.
- Adopt a good ready position and show good position on court.
- Use good footwork that allows the ball to be hit with good technique.
- Apply the principles of attacking.
- Identify spaces and understanding the tactics of hitting into gaps.

Unit objectives

- Step 1- To know and describe the correct grip and stance when holding a racket.
- Step 2- To adopt a good ready position.
- Step 3- To play shots on the forehand and backhand side of the body.
- Step 4- To use a variety of different shots, and serve, hitting with increasing consistency.
- Step 5- To employ tactics in games.
- Step 6- To participate in games following the rules and scoring correctly.



Key Vocabulary

Swing, Cooperative play, Aim, Movement, Direction, Partner, Cooperative, Send, Cooperate, Rally, Catch, Court target, Power, Accuracy, Space, Free Space, Control, Bounce, Racket

Hobbs Hill Wood Primary School

Knowledge Organiser for

PE

Year 6

Netball and Football



'Inspiring confident and independent learners'

Netball

National curriculum aims

2B- play competitive games, modified where appropriate, and apply basic principles suitable for attacking and defending.

2F- Compare their performance with previous ones and demonstrate improvement to achieve their personal best.



Skills

- Choose different formations to suit the needs of the game.
- Work effectively as a team.
- Use a variety of tactics to keep possession of the ball, applying principles of attacking,
- Use the defending principles in game situations, including marking, tracking, and covering to gain possession.
- Increase accuracy and confidence of passing and shooting skills.
- Use a variety of skills to keep the ball, thinking about moving towards goal, different positions and use the space.

Unit objectives

- Step 1- To pass the ball in a variety of different ways with confidence and control.
- Step 2- To move with the ball at speed.
- Step 3 – To mark, track and cover when defending.
- Step 4 –To keep possession of the ball when faced with opponents.
- Step 5- To work as a team, showing awareness of others.
- Step 6 – Apply principles of attacking and defending in game situations.

Key Vocabulary

Ball, Control, Speed, Direction, Passing, Pass, Chest Pass, Bounce Pass, Technique, Aim, Accuracy, Teamwork, Shoot, Score, Accuracy, Power, Rules

Football

National curriculum aims

2B- play competitive games, modified where appropriate, and apply basic principles suitable for attacking and defending.

2F- Compare their performance with previous ones and demonstrate improvement to achieve their personal best.



Skills

- Apply attacking skills to keep possession of the ball.
- To use the principles for defending – defend by marking, covering and tracking your opponents as appropriate.
- Participate in competitive games, modified where appropriate.
- Understand the positions in a team and the roles they play; and choose different formations to suit the needs of the game.
- Develop control and confidence whilst performing skills at speed.
- Change speed and direction to get away from the defender.
- Keep possession of the ball when faced with an opponent.
- Adapt games and activities making sure everyone has a role to play.

Unit objectives

- Step 1- To pass the ball to team mates in game situations.
- Step 2- To dribble the ball whilst under pressure.
- Step 3 – To defend in a team.
- Step 4 – To compete in games.
- Step 5 – To decide on ways to attack when playing games.
- Step 6- To decide on ways to defend in games.

Key Vocabulary

Football, Passing, Attacking, Defending, Throwing, Control, Saving, Tackle, Scoring, Aim, Dribbling, Turning, Direction