

# Year 2 Knowledge Organisers

Autumn One

# Computing



## Hanslope Primary School Computing Knowledge Organiser

Year 2: Computer systems and networks

### How does this link to my previous learning?

Use technology purposefully to create, organise, store, manipulate and retrieve digital content.

### National Curriculum Links:

- Use technology purposefully to create, organise, store, manipulate and retrieve digital content.

### How does this link to my future learning?

- Select, use, and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating, and presenting data and information.

### What key vocabulary will I learn:

- **Information Technology** - the study or use of systems (especially computers and telecommunications) for storing, retrieving, and sending information.
- **Computer** - an electronic device for storing and processing data, typically in binary form, according to instructions given to it in a variable program.
- **Device** - a thing made or adapted for a particular purpose, especially a piece of mechanical or electronic equipment.
- **Barcode** - a machine-readable code in the form of numbers and a pattern of parallel lines of varying widths, printed on a commodity and used especially for stock control.
- **Scanner** - a device for examining, reading, or monitoring something.
- **Communication** - means of sending or receiving information, such as phone lines or computers.

### What will I know by the end of this unit:

- To recognise the uses and features of information technology
- To identify the uses of information technology in the school
- To identify information technology beyond school
- To explain how information technology helps us
- To explain how to use information technology safely
- To recognise that choices are made when using information technology





# Hanslope Primary School

## Design Technology Knowledge Organiser

### Year 2 – Freestanding structures

#### Overview

Structures are things that are built for a purpose.

-Structures can be large (e.g. buildings and bridges) or small (e.g. chairs and tables).

-Freestanding structures are structures that can stand up without being attached to something else.

-Freestanding structures need to support their own weight and also the weight of the things/people using them.

So that they can do this, freestanding structures need to be well-designed: strong, rigid and stable

#### What key vocabulary will I learn:

Structure	Base
Freestanding	Materials
Support	Layering
Weight	Design
Strong	Make
Rigid	Evaluate
stable	



#### National Curriculum Links:

- Design, make and evaluate products
- Technical knowledge: apply their understanding of how to strengthen, stiffen and reinforce structures.

#### How does this link to my future learning?

- Shell structures – Year 4

#### What steps will I follow to create my final product?

**Designing:** - A structure that is stable.

-Structures are more stable when they have a wider base.

-Some materials are stronger and more rigid than others, e.g. card is stronger and more rigid than paper.

-Structures can also be made stronger and more rigid by making sure that parts and materials are properly joined together, e.g. with glue or tape.

-Folding and adding an extra layer of materials can also be used to strengthen and stiffen structures

**Making:**

Read your plan carefully. Make sure that you are prepared.

-Think about the skills you will need to use (e.g. cutting, assembling sticking) and the tools that you will need for them (e.g. scissors, glue).

-Think about finishing techniques (e.g. adding buttresses/extra layers for strength, or colour to make your structure look well presented!)

-Remember your purpose – does it work?

**Evaluating:** -How well does your structure work? Does it meet its purpose? How did you make your structure stable? How could you make it more stable? How did you make your structure strong and rigid? How could you make it more strong and rigid?

#### **Health and Safety**

-Remove any jewelry and tie back long hair.

-Walk safely and calmly around the classroom/workshop.

-When using a needle, keep your fingers well clear. Use a thimble where available.

-When you are not using your needle, keep it in the same safe place.

If using a sewing machine, follow staff instructions carefully.

Make sure that you are wearing the correct equipment for tasks.

If you need to move around with scissors, hold around the closed blades, facing down.

Report any accidents & clean up properly after yourself.

# Geography



## Hanslope Primary School Geography Knowledge Organiser

### Year 2: What is it like to live in Hanslope?

#### How does this link to my previous learning?

- Introduction to human and physical features (Yr1)
- Directional language (Yr1)
- Geography of my school (Yr1)
- Human and Physical features at the seaside (Yr1)

#### What key vocabulary will I learn:

- **Route**- A journey from a starting point to a destination.
- **Compass** – something that tells people directions (North, East, South, West )
- **Key**- A list of symbols that appear on a map
- **Village**- A group of houses and associated buildings, smaller than a town, situated in a rural area
- **Town** - A place where people live that is smaller than a city but bigger than a village.
- **Aerial view** - Any view from a great height, above
- **Physical Feature**- Physical features like seas, mountains and rivers are natural. They would be here even if there were no people around.
- **Human feature**- Like houses, roads and bridges are things that have been built by people.

#### National Curriculum Links:

- use basic geographical vocabulary to refer to: key physical features, including: beach, cliff, coast, forest, hill, mountain, sea, ocean, river, soil, valley, vegetation, season and weather key human features, including: city, town, village, factory, farm, house, office, port, harbour and shop
- use simple compass directions (North, South, East and West) and locational and directional language [for example, near and far; left and right], to describe the location of features and routes on a map
- use aerial photographs and plan perspectives to recognise landmarks and basic human and physical features; devise a simple map; and use and construct basic symbols in a key
- use simple fieldwork and observational skills to study the geography of their school and its grounds and the key human and physical features of its surrounding environment.

#### How does this link to my future learning?

- Similarities and differences between the UK and a region in a European Country (Yr3)
- Locate and name counties and cities of the UK and human and physical features (Yr3)
- Is the UK the same everywhere? (Yr3)
- How has the UK changed over time (Yr5)

#### What will I know by the end of this unit:

- I can make observations about and describe the local area and its human and physical geography
- I can explain the difference between human and physical geography
- I can use aerial photographs and plan perspectives to recognise landmarks and basic human and physical features
- I can follow and use directions
- I can use simple compass directions (NESW) to describe the location of features and routes on a map.
- I can draw a map of a real or imaginary place
- I can begin to understand the need for a key
- I can use class agreed symbols to make a simple key
- I can follow a route on a map

# Music



## Hanslope Primary School Music Knowledge Organiser

### Year 2: Myths and legends.

#### How does this link to my previous learning?

- This links to previous learning when creating rhythms and giving their music a structure with many layers.

#### National Curriculum Links:

- Use their voices expressively and creatively by singing songs and speaking chants and rhymes.
- Play tuned and untuned instruments musically.
- Listen with concentration and understanding to a range of high-quality live and recorded music.
- Experiment with, create, select and combine sounds using the inter-related dimensions of music.

#### How does this link to my future learning?

This links to future learning when creating more complex compositions in Year 3.

#### What key vocabulary will I learn?

Rhythm	A pattern of long and short notes.
Layers	The different instruments, rhythms or melodies that build the overall texture.
Melody	An arrangement of notes which sound tuneful.
Dynamics	The volume of the music (loud or quiet).
Timbre	The quality of sound e.g. smooth, scratchy, twinkly.
Pitch	How high or low a sound is.
Verse	A repeated section of a song that usually has different words (lyrics) each time it is repeated.
Chorus	A repeated section of a song that usually has the same words (lyrics) each time it is repeated.
Instrumental	A section of a song which is performed by instruments and has no vocals.

#### What will I know by the end of this unit:

- To create rhythms and arrange them in a particular order or structure.
- To identify the structure of a piece of music and write it down.
- To describe whether a musical texture is thick or thin.
- To explore ways of writing down different textural layers.
- To follow a given structure for a composition.
- To write a structure score accurately.
- To compose music with several layers.
- To perform their composition accurately, following the structure score.



## Hanslope Primary School Autumn 1

### PE Knowledge Organiser

**Year 2: Personal skills/Multi skills**

#### How does this link to my previous learning?

- Builds upon the multi skills and personal skills learnt in Y1

#### What key vocabulary will I learn:

- Instructions
- Practise
- Fluency
- Half turn
- Combine
- Pivot
- Front
- Reverse
- Challenging
- Core muscles
- Tight
- Instructions
- Balance
- Hop
- Skip

#### National Curriculum Links:

- Master basic movements including running, as well as develop balance, agility and coordination, and begin to apply these in a range of activities.
- Engage in competitive and cooperative physical activities.

#### How does this link to my future learning?

- Provides the basic concepts for Y3

#### What will I know by the end of this unit:

##### Personal skills:

- I can move with balance and control throughout.
- I can move with fluent, smooth movements.
- I can move well in both directions/on both sides.
- I can balance with minimum wobble (control).
- I can balance with standing foot still.
- I can balance with non-standing foot off the floor.

##### Multi Skills:

- I can run in a straight line
- I can begin to learn correct arm and leg technique
- I can use both one and two feet to take off and land
- I can learn the correct and safe technique to land
- I can jump over a variety of different heighted objects
- I can balance on either foot, on the floor and on elevated objects



## Hanslope Primary School PSHE Knowledge Organiser – Year 2

### Autumn 1: Families and relationships

#### How does this link to my previous learning?

In Year 1, children focused on:

- Understanding that their families look after them.
- To know words to describe how people are related to us.
- To recognise characteristics of a positive friendship

#### National Curriculum Links:

In KS1, children need to explore how families are different to each other. Explore friendly behaviour. Recognise how other people show their feelings. Identify how we can care for others when they are sad.

#### How does this link to my future learning?

This year, pupils will:

- Understand that families offer love and support.
- To begin to understand the range of families they may encounter now and in the future.
- To understand how other people may show emotions in different ways.

#### What key vocabulary will I learn:

Emotions	The range of feelings that someone can have, such as happiness or anger.
Family	A unit of people joined together by blood, marriage, or other means including adoption or a close social bond.
Feelings	Emotions that a person can have.
Friendship	A special bond between yourself and a friend.
Love	Feelings of affection and care.
Manners	A way of behaving that shows respect for other people.
Respect	A way of thinking about someone or behaving towards someone, in a kind and thoughtful way.
Stereotype	A view or idea about something, often someone, which is often untrue.

#### What will I know by the end of this unit:

- Families support and care for each other.
- Other people's families might be different to yours but that is OK.
- We can sometimes see how people are feeling due to their body language.
- If a friendship is making me unhappy, I need to know who I can talk to.
- We can decide what job we would like to do, being a boy or girl should not matter.
- Good memories can make us feel better.

# R.E



## Hanslope Primary School Religious Education Knowledge Organiser

**Year Two- Who Should You Follow?**

### National Curriculum Links:

- To find out about religious leaders and how and why they are followed (Believing- Belonging- Behaving- Reflecting and Responding- Making Links)

### How does this link to my previous learning?

**Year One-** Should everyone follow Jesus?

### How does this link to my future learning?

**Year Three-** Does Easter make sense without Passover?

Does Jesus have authority for everyone?

**Year Four-** Does the Christmas narrative need Mary?

**Year Five-** Are you inspired?

### What key vocabulary will I learn:

**Christianity-** the religion based on the person and teachings of Jesus Christ or its beliefs and practices

**Judaism-**religious and cultural traditions of the Jewish people

**Rabbi-** a spiritual leader or religious teacher in Judaism

**Vicar-** a holy representative of the church. A parish is led by a priest, usually called a vicar or rector.

### What will I know by the end of this unit:

- \*A story about a leader in the Bible
- \*A leader in society and suggest what makes that person special
- \* Reasons why people follow certain leaders
- \*What makes someone a good leader
- \*Why leaders are needed



Moses leading the Israelites through the desert- Exodus 1-2



Joshua leading the Israelites against Jericho- Joshua- Joshua



# Science



## Hanslope Primary School Science Knowledge Organiser

### Year Two – Everyday materials – properties and uses

#### How does this link to my previous learning?

- Distinguish between an object and the material from which it is made
- Identify and name a variety of everyday materials, including wood, plastic, glass, metal, water, and rock
- Describe the simple physical properties of a variety of everyday materials

#### What key vocabulary will I learn:

Suitable/unsuitable, use, object, material, property, wood, plastic, glass, metal, water, rock, fabrics, hard, soft, stretchy, flexible, waterproof, absorbent, transparent, translucent, opaque, shape, change, twist, squash, bend, stretch, roll, squeeze



#### National Curriculum Links:

- Identify and compare the suitability of a variety of everyday materials, for particular uses
- Find out how the shapes of solid objects made from some materials can be changed by squashing, bending, twisting and stretching.

#### How does this link to my future learning?

- Compare and group together everyday materials on the basis of their properties
- Use knowledge of solids, liquids and gases to decide how mixtures might be separated
- Demonstrate that dissolving, mixing and changes of state are reversible changes

#### What will I know by the end of this unit:

Properties of Materials			
Material	Image	Properties	What could it be used for?
Metal		-Metals are often strong, shiny, hard and long-lasting. -Metals can be hammered into different shapes.	-Metals can be made into things like pots and pans. -Metals can stretch into wires and rods.
Glass		-Glass can be strong, but thin glass shatters. -Glass is transparent and waterproof. It can be made into different shapes.	-Glass is most often used to make windows and glasses. -It is also used in making mirrors, table tops and windcreens.
Wood		-Wood is hard and strong. -Wood is long lasting and is a natural product. -Wood is flammable.	-Wood is often used to build furniture, like benches and desks. -Wood can be used to build houses and cabins.
Plastic		-Plastics can be tough or flexible and can be made into any shape. Plastics can be dyed different colours and can be made transparent.	-Plastics can be used to make packaging, bottles and toys. -Plastics can be moulded into plates, knives and forks.
Rubber		-Rubber is extremely tough, but also very flexible. -Rubber is elastic and also waterproof. Rubber doesn't tear easily.	-Not including food and drinks, water is still used in many, many products. For example, it is used in making paints, toothpastes, shampoos and cement.
Brick		-Bricks are very hard and strong. They are difficult to break. Bricks are thick and store heat well.	-Bricks are normally attached together with mortar and are used to make buildings. -They are also used for paving.
Paper		-Paper is often thin and can be made into lots of different shapes. Paper can be torn, it goes soggy when wet.	-Paper is normally used for writing. Paper is used in diaries, notebooks and for printing on. Paper is used for posters/displays.
Cardboard		-Cardboard is often thin but is firmer and tougher than paper. Cardboard is more difficult to tear. It goes soggy when wet.	-Cardboard is often turned into boxes and is then used for packaging items. It can be used for protection, e.g. protecting floors when painting.