# Year 1/2 Knowledge Organisers Autumn 2

# D.T



# Hanslope Primary School Design Technology Knowledge Organiser

Year 1/2: Mechanisms (wheels and axles)

### Overview:

Mechanisms are the parts that make something work.

-Mechanisms are all around us! Most objects that help us in our lives are made up of different mechanisms.



-Wheels are circular objects that roll on the ground, helping vehicles and other objects to easily move.

<u>-Axles</u> are rods that help wheels to rotate. The wheel can either rotate freely on the axle, or be attached to (and turn with) the axle.

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

Year 3 Mechanisms (Levers and Linkages)

### National Curriculum Links:

- Design, make and evaluate products
- Technical knowledge: understand and use mechanical systems in their products [for example, gears, pulleys]

### What key vocabulary will I learn?

Mechanism, wheel, axis, axle holder, friction, dowel, chassis, design, make, evaluate.

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

### Designing

### Chassis

Wheel

-The chassis is the frame or base on which the vehicle is built. A chassis should be strong and rigid enough to hold the vehicle.

-The chassis should include axle holders. These designed so that the axles do not have too much friction against them.

### Axle

-Consider what you will make your axle from. It needs to be strong enough to hold the wheels, and fit freely in the axle holder.

### Whee

-Consider whether your wheels will be fixed to the axle, or free.

-If fixed, they need to be firmly attached. If not, they need a stopper to prevent them from falling off.

-Some materials allow the wheel to move more freely on surfaces.

### **Making**

 -Wheels could be made from wood, card, MDF, plastic, cotton reels. or foam-covered reels.

-Axles could be made from dowels or paper sticks.

### Free Axles - Fixed Wheels

-The axles move with the wheels. Loose-fitting axleholder, tightly fixed wheels.

### Fixed Axles - Free Wheels

-The axles will remain fixed to the chassis. The wheels move alone. Tight-fitting axle-holder, loose-fitting wheels.

### Holes are axle holders

# Chassis noiders

### Evaluating

-How well does your mechanism work? Does it move smoothly?

-Does it meet its purpose?

-Who would use your mechanism? What would they like about it? -How did you stop any unwanted friction? How did this effect the mechanism?

-What else could you do to <u>improve</u> your mechanism?

### Health and Safety

-Remove any jewelry -Wear an apron and -Walk safely and calmly and tie back long roll up your sleeves. around the classroom/workshop.

Keep your work area and floor area clear – keep your belongings well clear. Follow the teacher's Make sure that you are cutting instructions wearing the correct equipment for tasks.

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

Report all spillages & clean up properly after yourself.

# Geography



### Hanslope Primary School Geography Knowledge Organiser

Year 1: Where is Hanslope Primary School? (fieldwork)

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

 EYFS learning goals in making sense of the world around them, including where they live.

### What key vocabulary will I learn:

- Map A 2D drawing of an area shown from above.
- Location A place or position.
- Local area The area around where you live.
- Aerial view What an area would look like from above, looking down on a specific area.
- Village A place with a small number of houses for a few hundred people found in the countryside. Hanslope is a village.
- · Directions Instructions about how to get somewhere.
- Route A way from one place to another.
- · Human features- Things that are made or built by humans.
- Physical features Natural things that exist like seas, mountains and rivers. They would be here even if no people were around.



### National Curriculum Links:

- use world maps, atlases and globes to identify the United Kingdom and its countries
- · use aerial photographs to recognise landmarks and basic human and physical features
- Use simple compass directions and locational and directional language to describe the location of features and routes on a map.
- Use simple fieldwork and observational skills to study.

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

 Identifying what it is like to live in Hanslope and the geographical features associated with it.

- I can make observations about and describe the school grounds and local area noting their distinctive features.
- I can explore and begin to recognise the distinctive features of the countries of the UK.
- I can begin to explain the difference between human and physical geography.
- I can begin to identify some human and physical features of my locality.
- I can use locational and directional language.
- I can use aerial photographs to recognise landmarks and basic human and physical features and devise a simple map.
- I can use simple fieldwork and observational skills to study geography of the school.

# Music



Year 1/2 - Pitch and Tempo (Theme: Snail and Mouse)

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

 This links to previous learning in year 1/2: Keeping the Pulse (Theme: My favourite things).

### Hanslope Primary School Music Knowledge Organiser

### 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 in Spring 1: Pitch (Theme: Superheroes)

### What key vocabulary will I learn?

- · Contrast: Different parts in a piece of music.
- Warm up: Getting the voice and body ready to sing.
  - · Beat: The heartbeat of the music.
- Singing voice: Using the voice to sing different sounds that can be high or low.
- Speaking voice: Using the voice to speak with a beat.
- Tempo: The speed of the music could be fast or slow.

- To demonstrate slow and fast with their bodies and voices.
- Demonstrate slow and fast beats while saying a rhyme and using an instrument.
- Perform a song using a singing voice.
- · Perform with an instrument.
- Observe others and move, speak, sing and play appropriately.
- Sing in time from memory, with some accuracy.
- Keep a steady pulse.
- Move, speak, sing and play demonstrating slow and fast beats.

# P.E Year 1



### **Hanslope Primary School** Autumn 2

PE Knowledge Organiser

Year 1: Dance and Attack and Defend 1

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

· Builds upon the foundational concepts learnt in EYFS

### National Curriculum Links:

- · Master basic movements including running, jumping, throwing and catching, as well as developing balance, agility and co-ordination, and begin to apply these in a range of activities
- · Participate in team games, developing simple tactics for attacking and defending
- · Perform dances using simple movement patterns.

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

Provides the foundation skills for Dance and Attack and Defend for Year 2.

### What key vocabulary will I learn:

- Explore
- Start
- Middle
- End
- Mirroring
- Perform
- Target
- Shoot
- Attacking
- Defending
- Score

### Dance:

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

- · Be able to move as if we were exploring in the jungle.
- Be able to create and perform movements which show friendship.
- · Be able to perform leading and following movements.
- · Be able to perform a short dance with a clear start, middle and end.
- · Be able to use mirroring in a dance phrase.
- · Be able to give and respond to simple feedback.

### Attack and Defend 1:

- · Be able to hit a target.
- · Be able to defend a target.
- · Be able to roll and slide balls and beanbags.
- · Be able to shoot in a game to get points.
- · Be able to work with a partner to score points.
- · Be able to use our attacking and defending skills in a game

# PE Year 2



# Hanslope Primary School Autumn 2

PE Knowledge Organiser

Year 2: Dance and Attack and Defend 1

### National Curriculum Links:

- Master basic movements including running, jumping, throwing and catching, as well as developing balance, agility and co-ordination, and begin to apply these in a range of activities
- Participate in team games, developing simple tactics for attacking and defending
- · Perform dances using simple movement patterns.

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

· Dance and Attack and Defend in Year 1

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

• Links to Dance in Year 3 and puts foundations in for specific sports

### What key vocabulary will I learn:

- Сору
- Repeat
- Duet
- Duet
- CannonControl
- Bounce
- Pass
- Dribbling
- Attack
- Defend

### Dance:

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

- Be able to show fear, anger and other emotions through facial expressions and actions
- Be able to copy and repeat a dance phrase with travel
- · Be able to perform in unison as a whole class.
- Be able to perform in duet.
- Be able to show a simple phrase of canon.
- · Be able to create an ending to their dance.

### Attack and Defend:

- · Be able to kick the ball over long and short distances.
- · Be able to stop a ball with control using the foot.
- Be able to work as a team to keep the ball.
- Be able to bounce a ball with a partner.
- Be able to bounce the ball while moving (dribbling).
- · Be able to pass the ball forward in a game.

# **PSHE**



## Hanslope Primary School PSHE Knowledge Organiser – Year 1

Autumn 2: Health and Wellbeing

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

In EYFS, children focused on:

- · Discuss ways we look after ourselves.
- · Identifying how characters within a story may be feeling.
- · Identifying and expressing my own feelings.
- · Exploring coping strategies to help regulate emotions.
- Exploring different facial expressions and identifying the different feelings they can represent.
- Exploring how exercise affects different parts of the body.

### What key vocabulary will I learn:

Allergy	A strong reaction to something which does not affect most people.
	The range of feelings that someone can have, such as happiness or anger.
Feelings	Emotions that a person can feel.
Germs	A very small living thing which can make us ill.
III	Not feeling well because of an illness or disease.
Qualities	The personality traits that make someone who they are.
Relax	To rest or take a break.

### **National Curriculum Links:**

In KS1, children need to explore how their health and wellbeing are sometimes affected by how they feel and how they look after themselves.

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

This year, pupils will:

- Know that strengths are things we are good at.
- Know the words to describe some positive and negative emotions.
- Know that sleep helps my body to repair itself, to grow and restores my energy.

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

- Some emotions we can feel are happiness, sadness, anger and upset.
- Different situations can make us feel different emotions.
- Some people can be allergic to some food.
- Some people have jobs that help us to stay healthy.



# Hanslope Primary School PSHE Knowledge Organiser – Year 2

### Autumn 2: Health and Wellbeing

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

In Year 1, children focused on:

- · Know that strengths are things we are good at.
- Know the words to describe some positive and negative emotions.
- Know that sleep helps my body to repair itself, to grow and restores my energy.

### What key vocabulary will I learn:

Diet	The food that we eat.
	The range of feelings that someone can have, such as happiness or anger.
Exercise	Movement of the body for our health and fitness.
Goal	Something you want to achieve.
Growth mindest	Believing that we can achieve things if we work hard. 'I can't do it YET!'
Healthy	Being well, both physically and mentally.
Physical activity	Something that requires someone to move their body.
Relaxation	Doing calming activities such as having a bath or reading a book.
Skill	The ability to do something well.
Strengths	The things we are good at.

### National Curriculum Links:

In KS1, children need to explore how their health and wellbeing are sometimes affected by how they feel and how they look after themselves.

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

This year nunils will

- Know that food and drinks with lots of sugar are bad for our teeth.
- Understand the importance of exercise to stay healthy.
- Understand the balance of foods we need to keep healthy.
- Know that breathing techniques can be a useful strategy to relax.
- Know that we can feel more than one emotion at a time.
- Know that a growth mindset means being positive about challenges and finding ways to overcome them.

- Exploring the effect that food and drink can have on my teeth.
- Exploring some of the benefits of exercise on body and mind
- · Exploring some of the benefits of a healthy, balanced diet.
- Suggesting how to improve an unbalanced meal.
- · Learning breathing exercises to aid relaxation.
- Exploring strategies to manage different emotions.
- · Developing empathy.
- · Identifying personal goals and how to work towards them.
- Exploring the need for perseverance and developing a growth mindset.

# Science



### Year One/ Two - Seasons

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

- Understand the effect of changing seasons on the natural world around them (EYFS)
- · Explore the natural world around them (EYFS)

### What key vocabulary will I learn:

Season- The way the year is divided according to its weather

Sunrise- The time when the sun comes up

Sunset - The time when the sun goes down

Weather – What the sky and the air outside are like, such as cold and cloudy

Spring- The season where trees, plants and flowers start to bud and bloom

Summer - The warmest season of the year

Autumn – The season when leaves change colour and fall off the trees.

Winter- The coldest season of the year

Rain Gauge – equipment which measures how much rain has fallen

**Hibernate** – when an animal goes into a long, deep sleep to survive the winter months

### Hanslope Primary School Science Knowledge Organiser

### National Curriculum Links:

- observe changes across the four seasons
- observe and describe weather associated with the seasons and how day length varies.

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

- Earth and space (Year 5)
- Weather and seasons (Year 1 geography link)

- The United Kingdom has four seasons: Spring, Summer, Autumn and Winter
- In the UK, it is usually colder and rainier in winter, and hotter and dryer in the summer
- · The seasons have an effect on landscapes, plant and animal life
- I can observe changes across the four seasons
- I can observe and describe weather associated with the seasons and how day length varies
- . I can describe what happens to trees throughout the seasons
- I understand how humans adapt their behaviour and clothing to survive the different seasons
- · I can record the weather using a weather diary
- I can study images, using these to suggest which season it is
- I can understand and describe how changing weather influences the behaviour of animals



