### Terms

#### Autumn Term

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<thead>
<tr>
<th>Term</th>
<th>Unit Title and Summary of Content</th>
<th>Key N.C. objectives</th>
<th>Links With C.E.</th>
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<tbody>
<tr>
<td>AUTUMN TERM</td>
<td>Animals, including humans - Ourselves</td>
<td>Animals, including humans (1AH)</td>
<td>Development of co-ordination:</td>
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<tr>
<td></td>
<td>• Share baby photos together as a class. Recognise themselves and family members on baby photos</td>
<td>iv) identify, name, draw and label the basic parts of the human body and say which part of the body is associated with each sense</td>
<td>Gross Fine Hand-eye</td>
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<td></td>
<td>• Observe changes over time between the baby photos and current ones (Exploring)</td>
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<td>Sitting balance.</td>
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<td></td>
<td>• Consider and notice patterns between foot and hand size.</td>
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<td>Spatial awareness</td>
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<td></td>
<td>• Together, make a class wall display of Our Body Patterns, with photographs and measurements,</td>
<td>Pattern seeking.</td>
<td>Body image</td>
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<td>to show their understanding and learning (Pattern seeking).</td>
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<td>• Talk to each other about what makes a difference to how well they can hear a whistle when it is blown.</td>
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<td>Rhythm, speech.</td>
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<td>• Investigate ideas by going outside and asking and extending questions and noticing patterns (Pattern seeking, exploring over time).</td>
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<td>Widening vocabulary.</td>
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<td>• Identify the differences between fruit and vegetables using our senses independently. Identify different types of fruits and vegetables - matching.</td>
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<td>Attention, concentration, memory.</td>
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<td></td>
<td>• Classify fruit and vegetables into different groups (Sorting, classifying and identifying). Tasting soft fruits and vegetables and finding the favourite ones, using other senses to explore hard ones.</td>
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<td>Direction: in time.</td>
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<td>• Go outside to explore the school grounds using different senses.</td>
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<td>in space.</td>
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<td>• Blindfold each other to find out what it is like without the sense of sight (Exploring). Identify fruits and vegetables without seeing them.</td>
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<td>• Accept a challenge to produce sensory items for a local community group.</td>
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<td>• Classify different stimulating items into sensory groups on a sensory board and in sensory bottles for a local community group (Sorting, classifying and identifying).</td>
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<td>Working Scientifically (KS1 WS)</td>
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<td>i) asking simple questions and recognising that they can be answered in different ways</td>
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<td>ii) observing closely, using simple equipment</td>
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<td>iii) performing simple tests</td>
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<td>iv) identifying and classifying</td>
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<td>v) using their observations and ideas to suggest answers to questions</td>
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<td>vi) gathering and recording data to help in answering questions</td>
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<td><strong>Extended writing opportunities:</strong></td>
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<td>Stories with repeating patterns: use the items on the sensory board as prompts to orally retell a familiar story before writing it down</td>
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Animals, including humans – Our pets

- Use observation skills to look closely at creatures in the school grounds. Notice small creatures in the garden and track their movement. Make a visual record of their observations in drawings and photographs, and annotate to show their understanding and learning (Pattern seeking).
- Observe and consider what type of conditions a woodlouse or a mini beast might prefer with helping questions. Sort out minibeasts and other animals.
- Set up different colonies in the classroom based on what they know about their habitats.
- Observe the woodlice over a period of time and record the results (Exploring, Observing over time).
- Discuss the problem: which paper will be best for the job of mopping up the puppy accident?
- Consider an investigation to test the different types of paper (Fair Test, Problem Solving). Water play.
- Understand that animals’ features vary and why some animals make good pets and others do not. Recognise and name common household pets.
- Talk about and design a good pet (Researching and analysing secondary sources).
- Consider what is involved in keeping a real pet happy and healthy. Collecting objects from the selves for keeping an animal.
- Observe different pets in the classroom.
- Study their similarities and differences and what features they have in common that make them good pets (Exploring).

Extended writing opportunities

Labels, lists and signs: make a list of all of the things you need and the things you have to do, in order to look after a particular pet.

Animals, including humans (IAH)

- i) identify and name a variety of common animals including fish, amphibians, reptiles, birds and mammals
- ii) identify and name a variety of common animals that are carnivores, herbivores and omnivores
- iii) describe and compare the structure of a variety of common animals (fish, amphibians, reptiles, birds and mammals, including pets)

Working Scientifically (KS1 WS)

- i) asking simple questions and recognising that they can be answered in different ways
- ii) observing closely, using simple equipment
- iii) performing simple tests
- iv) identifying and classifying
- v) using their observations and ideas to suggest answers to questions
- vi) gathering and recording data to help in answering questions
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<td>SPRING TERM</td>
<td>Lets' build! (Everyday materials)</td>
<td>Everyday materials (1EM)</td>
<td>Development of co-ordination:</td>
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<td></td>
<td>• Identify and name the materials found in the classroom, using the scientific words: wood, plastic, glass and metal. Investigating different materials.</td>
<td>i) distinguish between an object and the material from which it is made</td>
<td>Gross</td>
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<td>• Sort the objects according to their properties (what material is this made of? What is its useful property?) with support.</td>
<td>ii) identify and name a variety of everyday materials, including wood, plastic, glass, metal, water, and rock</td>
<td>Fine</td>
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<td>• Play Material Snap in pairs, placing an object each on the table and seeing if their properties are the same. (Sorting, classifying and identifying). Building with bricks</td>
<td>iii) describe the simple physical properties of a variety of everyday materials</td>
<td>Hand-eye</td>
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<td>• Explore a variety of different magnets and objects with help (both magnetic and non-magnetic), including paperclips in jars/bowls of water. Consider challenges such as: Can you get the paperclip out of the water without getting your hands wet? Are different magnets able to hold the same amount of paper clips?</td>
<td>iv) compare and group together a variety of everyday materials on the basis of their simple physical properties</td>
<td>Sitting balance.</td>
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<td>• Create games in the classroom using the magnets, such as a fishing game, magnetic maps (magnet under a piece of paper and a paperclip), moving magnets without touching them, strength test with different magnets (Exploring, problem solving). Playing games that include a magnet to explore its properties, practising pulling with manual support.</td>
<td>Working Scientifically (KS1 WS)</td>
<td>Body image</td>
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<td>• Sort objects in the classroom according to these criteria: hard, soft, stretchy, stiff, bendy/floppy (Sorting, classifying and identifying).</td>
<td>i) asking simple questions and recognising that they can be answered in different ways</td>
<td>Fine manipulation skills</td>
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<td>• Listen to the story of three pigs who didn’t choose the right materials and recreate using straw, twigs, bricks and a hairdryer (Exploring, problem solving).</td>
<td>ii) observing closely, using simple equipment</td>
<td>Group as a social environment</td>
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<td>iii) performing simple tests</td>
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<td>Direction: in time.</td>
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<td>Extended writing opportunities</td>
<td>Instructions: Imagine you are one of the three little pigs. Write instructions to one of the other pigs explaining how to make a successful alternative house.</td>
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| **National Institute of Conductive Education**  
| **School Group**  
| **Science**  
| **Long term Plan 2018-2019**  

| **Everyday materials - Marvellous materials**  
| - Fixing a torn umbrella, using materials they select for their useful properties.  
| - Exploring different materials.  
| - Discuss selection of materials for fixing the umbrella: what properties does this material have that makes it a good choice? *(Problem solving)*  
| - Investigate the materials for their useful properties, considering questions such as: how can we know that this material will not let the rain through? How can we test it? Taking a leading role in the discussion. Active participation in the investigation using hands to check if materials are waterproof.  
| - Use pipettes to simulate raindrops and experiment with the different materials *(Observing over time, problem solving)*.  
| - Observe a block of ice and record the changes. Painting on ice: [http://www.science-sparks.com/painting-on-ice/](http://www.science-sparks.com/painting-on-ice/).  
| - Devise an investigation to melt the ice quickly or slowly with support. *(Exploring, problem solving, observing over time)*.  
| - Create puddles in shallow containers or plastic sheets.  
| - Drawing chalk lines around the puddles at different times, measure and observe the changes and make predictions.  
| - Create a simple chart, or series of diagrams, to show how the puddles change. Lego bar chart: [http://www.science-sparks.com/lego-bar-charts/](http://www.science-sparks.com/lego-bar-charts/) *(Exploring, observing over time)*.

**Extended writing opportunities**  
Recount: Write an account of puddle day.

**Everyday Materials (1EM)**  
i. distinguish between an object and the material from which it is made  
ii. identify and name a variety of everyday materials, including wood, plastic, glass, metal, water and rock  
iii. describe the simple physical properties of a variety of everyday materials  
iv. compare and group together a variety of everyday materials on the basis of their simple physical properties

**Working Scientifically (KS1 WS)**  
i) asking simple questions and recognising that they can be answered in different ways  
ii) observing closely, using simple equipment  
iii) performing simple tests  
iv) identifying and classifying  
v) using their observations and ideas to suggest answers to questions  
vi) gathering and recording data to help in answering questions
### SUMMER TERM

**Wonderful weather (Seasonal changes)**
- Go outside and look at the weather, observe the temperature and wind. Showing an understanding of hot and cold.
- Suggest how to dress a teddy or doll appropriately for the current weather conditions (Exploring, pattern seeking).
- Take the temperature outside in the morning and the afternoon. Hot and cold water bottle. 4 seasons
- Record these observations in the classroom and discuss the changes (Exploring, pattern seeking).
- Play shadow tag and look at the shape of shadows.
- Watch a shadow puppet show.
- Consider the questions: Does my shadow always look like that? What was it like first thing in the morning? Is it better to play shadow tag at lunchtime or after school? (Exploring, researching and analysing secondary sources)
- Make a bar chart with support of paper strips of shadow length plotted against time intervals.
- Set the rainfall gauges up in the playground and record the rainfall over a period of time.
- Make a windsock to measure wind direction and a wind vane to measure the direction of the wind (Observing over time, pattern seeking).

**Extended writing opportunities**
Labels, lists and signs: Make notices and signs to go with your class weather station.

### Key N.C. objectives

- **Seasonal Changes (1SC)**
  1. Observe changes across the four seasons.
  2. Observe and describe weather associated with the seasons and how day length varies.

- **Working scientifically (KS1 WS)**
  1. Asking simple questions and recognising that they can be answered in different ways
  2. Observing closely, using simple equipment.
  3. Performing simple tests.
  4. Identifying and classifying
  5. Using their observations and ideas to suggest answers to questions

### Links With C.E.

- Development of co-ordination:
  - Gross
  - Fine
  - Hand-eye
- Sitting balance.
- Body image
- Group as a social environment
- Rhythm, speech.
- Widening vocabulary.
- Attention, concentration, memory.
- Direction: in time. in space.
**Plants - What's Growing in our Gardens?**

- Go outside to the school garden to look at plants. Walking in the sensory garden, touching and smelling different herbs.
- Make a map of the garden plot, identifying the plants and predicting what they will turn into when they are fully grown with support. Differentiate between trees and plants, taking photograph of them.
- In groups, prepare tubs and plant chitted potatoes (Exploring).
- Design and set up a garden centre in the classroom with help.
- Plant a bean in a jar and seeds in a bag and keep them in the classroom garden centre (Observing over time).
- Create large pollen sculptures out of clay and display, along with facts, in the classroom (Exploring).
- Find flowers outside in the playground and carefully examine them with a magnifying glass. Sketch and photograph them. Make a large model of the inside of a flower using junk modelling materials (Exploring, researching and analysing secondary sources).
- Do bark and leaf rubbings using paper and wax crayons.
- Understand the basic structure of a tree and what goes on inside. Learn to name part of the tree. Matching up parts of the tree on a picture of photograph.
- Represent the inside of a tree through playground art, using cloths, chalk and found materials. (Exploring)

**Extended writing opportunity**

**Information text:** Explain the main parts of a flower and their purpose.

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**Plants (1P)**

i) identify and name a variety of common wild and garden plants, including deciduous and evergreen trees.

ii) identify and describe the basic structure of a variety of common flowering plants, including trees.

**Working scientifically (KS1 WS)**

i) asking simple questions and recognising that they can be answered in different ways

ii) observing closely, using simple equipment.

iii) performing simple tests.

iv) identifying and classifying

v) using their observations and ideas to suggest answers to questions