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| **NC statement missed** | **End of KS2 TAF statement** | **Opportunity to Catch up** | **Initial assessment suggestions\*** | **Notes - and highlighted risk**  (Red will need to be planned explicitly in addition to usual topics, Green will fit readily into current units) |
| **Year 4** | | | | |
| **Living things and their habitats** | | | | |
| recognise that living things can be grouped in a variety of ways | use the observable features of plants, animals and micro-organisms to group, classify and identify them into broad groups, using keys or other methods [Y6]. | Y5 Habitats unit | Sorting activities – own and then given criteria | Familiarity with the main vertebrate groups and knowledge of invertebrates as a grouping and that there are flowering and non-flowering plants needed when studying animal and plant life cycles in Y5. Will be taught in greater detail in Y6. Teach relevant observable features for classification alongside life cycles (a distinguishing difference between the groups) |
| explore and use classification keys to help group, identify and name a variety of living things in their local and wider environment | Y5 Habitats unit  or  Y6 Habitats unit | Observation and identification first-hand (local / visit) or from images (distant habitats) | Expand Y5 habitats to include use of keys and consideration of changing habitats.  or  Include more practical opportunities to observe and classify plants and animals in their habitats in the Y6 unit (classification) and consider environmental change with adaptation in Y6 evolution. |
| recognise that environments can change and that this can sometimes pose dangers to living things | describe the requirements of plants for life and growth [Y3] and **explain how environmental changes may have an impact on living things [Y4].** | Y5 Habitats unit  or  Y6 Evolution unit | Concept Cartoon – Plants and animals (2.3) [££] |

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| **Year 4** | | | | |
| **Animals, including humans** | | | | |
| describe the simple functions of the basic parts of the digestive system in humans | **name, locate and describe the functions of the main parts of the digestive [Y4],** musculoskeletal [Y3],and circulatory systems [Y6], and describe and compare different reproductive processes and life cycles, in animals [Y5]. | Y5 or Y6 Additional lessons | Explorify – It takes more than guts (Odd one out)  Annotated drawing – what happens to food when you eat it? | No specific link to future learning in KS2. Teach stand-alone before the end of the key stage. Does not need to be taught it the same time as food chains. Limited depth needed – detailed process of digestion not needed until KS3 |
| identify the different types of teeth in humans and their simple functions |
| construct and interpret a variety of food chains, identifying producers, predators and prey. | **construct and interpret food chains [Y4].** | Y5 or Y6 Additional lessons | Explorify – Family meal (Video) | Children should have basic knowledge from Y2. Small amount of stand-alone teaching before the end of the key stage. Food webs not needed until KS3. |

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| **Year 4** | | | | |
| **States of matter** | | | | |
| compare and group materials together, according to whether they are solids, liquids or gases | **describe the characteristics of different states of matter and group materials on this basis; and describe how materials change state at different temperatures, using this to explain everyday phenomena, including the water cycle [Y4].** | Y5 Materials unit  or  Y5 Additional unit | Concept Cartoons – Liquids (3.4), Balloon (3.1), Fizzy drink (3.5) [££] | Needed for Y5 materials (changes) so must be taught in Y5.  To avoid overloading Y5 with more materials content and to allow for revisiting and consolidation consider splitting the teaching across Y5 and Y6 e.g. by teaching states of matter and properties and uses (short unit) in Y5, probably as 2 separate units and teaching mixing, separation and changes as an additional unit in Y6.  Particle model not needed until KS3. |
| * 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 (°C) | Concept Cartoon – When water is boiling (3.9), Condensation (4.3) [££] |
| identify the part played by evaporation and condensation in the water cycle and associate the rate of evaporation with temperature. | Discussion question – Where does rain come from? |

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| **Year 4** | | | | |
| **Sound** | | | | |
| identify how sounds are made, associating some of them with something vibrating | **use the idea that sounds are associated with vibrations, and that they require a medium to travel through, to explain how sounds are made and heard [Y4].** | Y5 or Y6 Additional unit  plus  Cross-curricular | Explorify – What’s that sound? (Problem solver) | No specific link to future learning in KS2. Teach stand-alone in Y5 or Y6 also using cross-curricular teaching in music. |
| recognise that vibrations from sounds travel through a medium to the ear | Concept Cartoon – Pipes (8.2) Radio (8.11) [££] |
| find patterns between the pitch of a sound and features of the object that produced it | **describe the relationship between the pitch of a sound and the features of its source; and between the volume of a sound, the strength of the vibrations and the distance from its source [Y4].** | Concept Cartoon – Drums (8.1) [££]  Explorify – Bottle Orchestra (video) |
| find patterns between the volume of a sound and the strength of the vibrations that produced it | Concept Cartoon – Drums (8.1) [££] |
| recognise that sounds get fainter as the distance from the sound source increases | Sound walk |

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| **Year 4** | | | | |
| **Electricity** | | | | |
| identify common appliances that run on electricity | use simple apparatus to construct and control a series circuit, and describe how the circuit may be affected when changes are made to it; and use recognised symbols to represent simple series circuit diagrams [Y6]. | Y6 Electricity unit | What if (or PMI) we lived in a world without electricity? | Basic circuits can be taught at the start of the Y6 unit – adjust starting point.  Be cautious about progressing immediately to circuit diagrams before children have had the chance to demonstrate their understanding through drawings.  Check D&T schemes for any electrical and control work in Y5 which will need to involve teaching simple circuits and will change the Y6 starting point.  Include in Y6 electricity. Do not include electrical conductors and insulators in Y5 materials if electricity has not been taught. |
| construct a simple series electrical circuit, identifying and naming its basic parts, including cells, wires, bulbs, switches and buzzers | Practical challenges – can you light the bulb using 2 wires / 1 wire / no wires? Make a circuit where you can switch a buzzer on and off?  Discussion: What do you need to make the bulb light or the buzzer buzz? Why?  Concept Cartoon – Switch (5.1) [££] |
| identify whether or not a lamp will light in a simple series circuit, based on whether or not the lamp is part of a complete loop with a battery |
| recognise that a switch opens and closes a circuit and associate this with whether or not a lamp lights in a simple series circuit |
| recognise some common conductors and insulators, and associate metals with being good conductors | group and identify materials [Y5], including rocks [Y3], in different ways according to their properties, based on first-hand observation; and justify the use of different everyday materials for different uses, based on their properties [Y5]. | Explorify mystery bag activities – Interesting insulators or Electrifying metals  Problem solving / discussion– what could we use if we have no wires, and why? |

*Main sources of initial assessment activities included in this document (further assessment resources ideas are included in the ‘How to Guide’):*

* *Explorify* [*https://explorify.wellcome.ac.uk/*](https://explorify.wellcome.ac.uk/)
* *Concept Cartoons – Stuart Naylor and Brenda Keogh* [*https://www.millgatehouse.co.uk/*](https://www.millgatehouse.co.uk/)