

TMS Science Launchpad - Year 2023/2024

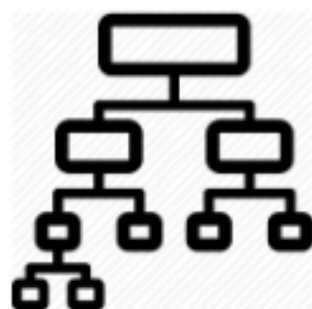
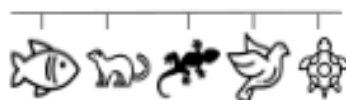
Year 4 - Biology : Living things & their habitats

Substantive knowledge:

Living things can be grouped in different ways. (wide selection including animals, flowering plants and non-flowering plants - pond dipping, ocean, other dependent on STAR learning)



vertebrates (backbone)



Classification

Mammals:

live young, hair/fur, lungs, provide milk for young, warm blooded

Birds:

lay eggs with hard shells, feathers, lungs, warm blooded

Fish:

lay eggs, scales, gills, cold blooded

Amphibians:

smooth or bumpy, moist skin, Lay eggs with soft shells, cold blooded,

Reptiles:

scales, usually lay eggs (Leathery shells), cold blooded
(classification keys investigation)

Environmental change affects different habitats differently.

Different organisms are affected differently by environmental change.

Habitats change throughout the year.

Human activity significantly affects the environment both positively and negatively.

(nature reserves, ecologically planned parks, garden ponds or population and development, deforestation.)



Vocabulary:

environment, flowering, nonflowering, plants, animals, vertebrates, fish, amphibians, reptiles, mammals, invertebrate, human impact, nature reserves, deforestation, migrate, hibernate, environment

Disciplinary knowledge

Identify and classify	Identify and classify	Observation over time	Pattern seeking	Comparative tests	Observation over time
Can we use the classification keys to identify all the animals that we caught and plants we found pond dipping? (observe closely)	Can we classify these animals according to the animal class? (observe closely)	How does the average temperature of the pond water change in each season? (conclusions and presenting results)	How has the use of insecticides affected the bee population? (ask scientific questions)	Does the amount of light affect how many woodlice move around?(Observe closely)	How does the variety of invertebrates on the school field change over the year?(evaluate an enquiry)

Research



Why are people cutting down the rainforests and what effect does that have?
How do nature reserves positively affect the environment?