FANTASTIC BEASTS

Entry Task

Explore the school grounds to identify flora and fauna. How does plant life differ dependent on the environment?

What to revisit?

Science - Describe difference in life cycle of a mammal, amphibian, insect and bird. Describe reproduction in plants and animals.

Geography - Identify the significance of the Equator, Tropics of Cancer and Capricorn, the Northern and southern , Hemispheres, latitude and longitude.

Art - Critique Creatures Y2

Big Question

How and why are plants important to life?

Threads

Adaptation, Fertility, Significance, Community

How do insects use plants?

What is the life cycle of flowering and non flowering plants?

What is the difference between sexual and asexual reproduction in plants? **Fertility**

How **significant** are bees to plant production?

Investigation -How can new plants be grown from different parts of a parent plants? **(Scientific Enquiry)**

What is ergonomics and why do we analyse existing products? Can I research how products have evolved to be more ergonomically designed?

Can I evaluate a range of existing bird boxes, discussing their durability and utility? Can I identifying their primary and secondary functions? Can I produce a design criteria for my bird box considering FLUMPS?

Can I work collaboratively to gather materials and discuss design choices including joining and fastening techniques to achieve desired aesthetics? Can I produce a annotated sketch of my 3D design using isometric technique?

Why do architects use CAD, what are the pro's and con's? Can I use CAD to produce my final design of my prototype bird box and present my ideas to my peers?

Can I recall the safety precautions needed during my project? Can I use measuring, cutting and joining techniques, to construct my bird box?

What are different evaluating techniques? Can I select and carry out an appropriate evaluation?

Look in detail at specimen drawings completed by Charles Darwin , building on observational drawing undertaken in Y2. Look specifically at use of line, tone, pattern, and implied texture.

Can I create, detailed anatomically accurate drawings of mini beasts showing increasing control of visual elements?

In response to specific critique and feedback, can I improve my observational drawings so that they become increasingly accurate?

Can I use my drawings to inspire a three dimensional sculpture of a chosen mini beast, selecting materials for purpose, audience and effect?

Can I evaluate my own artwork and the artwork of others, describing how different pieces make me feel?

Celebration/Evaluation

Using prior knowledge, design a low maintenance garden to encourage wildlife. Explain your choices to your class.

Curriculum Passport Challenge

Become a nature detective, visiting Court Hey Park to explore plants and wildlife

Key Vocabulary

As a scientist, I will use...

life cycle, life span, cocoon, insect, sexual, asexual, germination, fertilisation, plantlets, reproduction, stamen, stigma, filament, anther, sepal, ovary, ovule,

As a Design technician II will use...

Ergonomics, existing products, durability, utility, FLUMPS, design criteria, aesthetics, 3D, isometric technique, computer aided design CAD, safety precautions, prototype, cutting and joining techniques

Assemble, prototype, cutting, shaping, finishing,

DRIVER SUBJECTS ARE SCIENCE, DT, ART