OUTDOOR LEARNING

LEAF LITTER

RISK DISCUSSION
MATERIALS:
CHALK/PENCIL/PAPER

15 min - 1 hour

WARM UP

Give the children 3 minutes to collect 5 different types of leaves

Divide the class into groups of 5

SORTING BY COLOUR

Colour / Quantity - the children can use any method - piles, under feet, child assigned a colour to hold etc

Question: Ask them what colours they have?
Call out Red / Green / Yellow / Brown and each group shouts and total
CREATE A GRAPH / TABLE
(see examples pg 3)
Ask them why they are different colours and why they are on the ground

NATURE DEBATE

Why is there more leaf litter in Autumn / Winter?
Can you think of creatures which love leaf litter?
Should we always tidy up leaf litter?

SORTING BY SIZE

Put the leaf pile in size order smallest à biggest
Each group selects their biggest and smallest leaf, nominating 1 person to bring it to the teacher
Ask them to raise there biggest leaf up in the air and the rest of the class votes on which is the biggest
Repeat with the smallest leaf

LEAF ANATOMY

Demonstrate these parts of a leaf to them and ask them to dissect the leaf naming each part
(diagram pg 2)

ASSESSMENT

Questions
Photograph activity
Record findings
Comments of students

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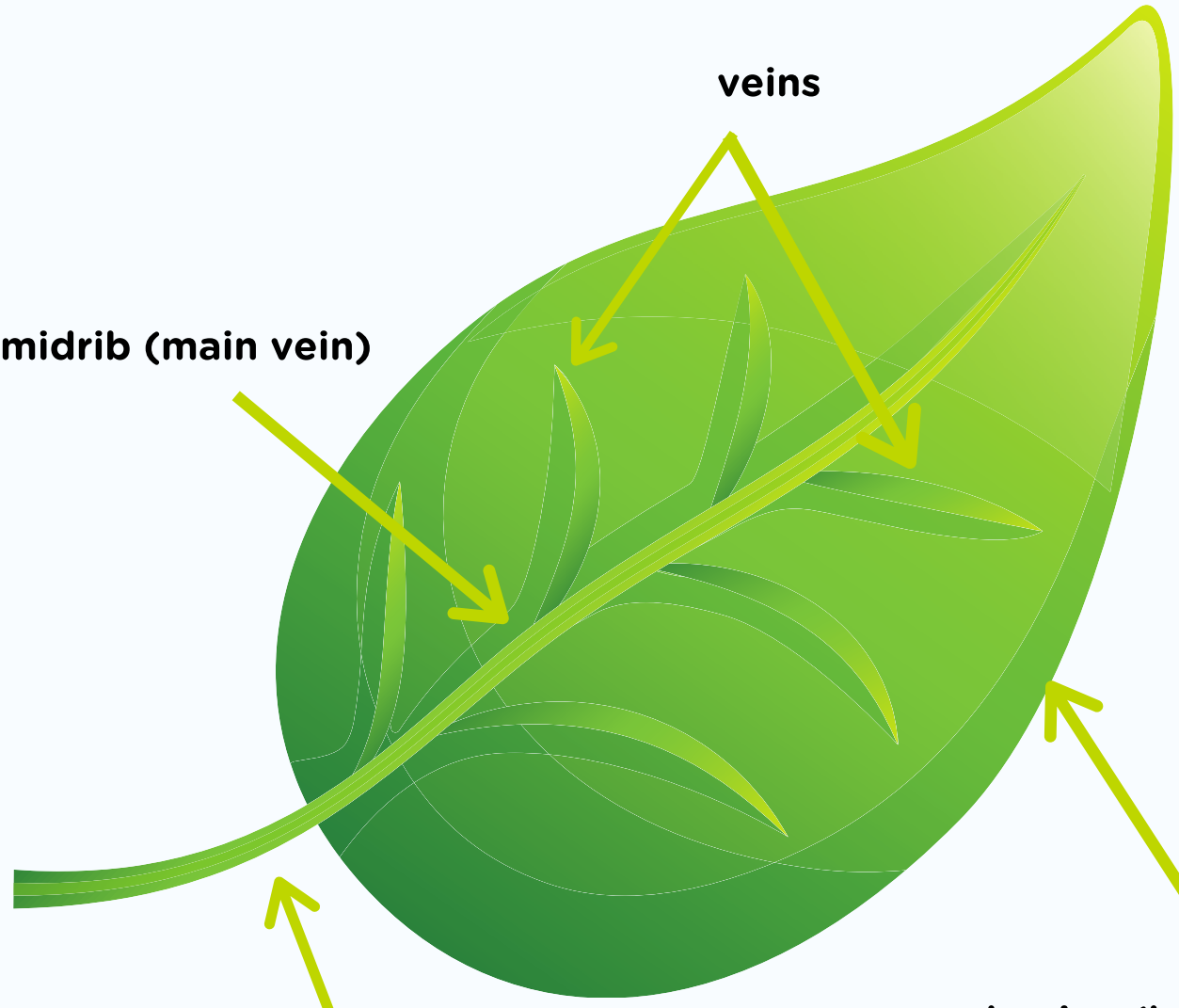
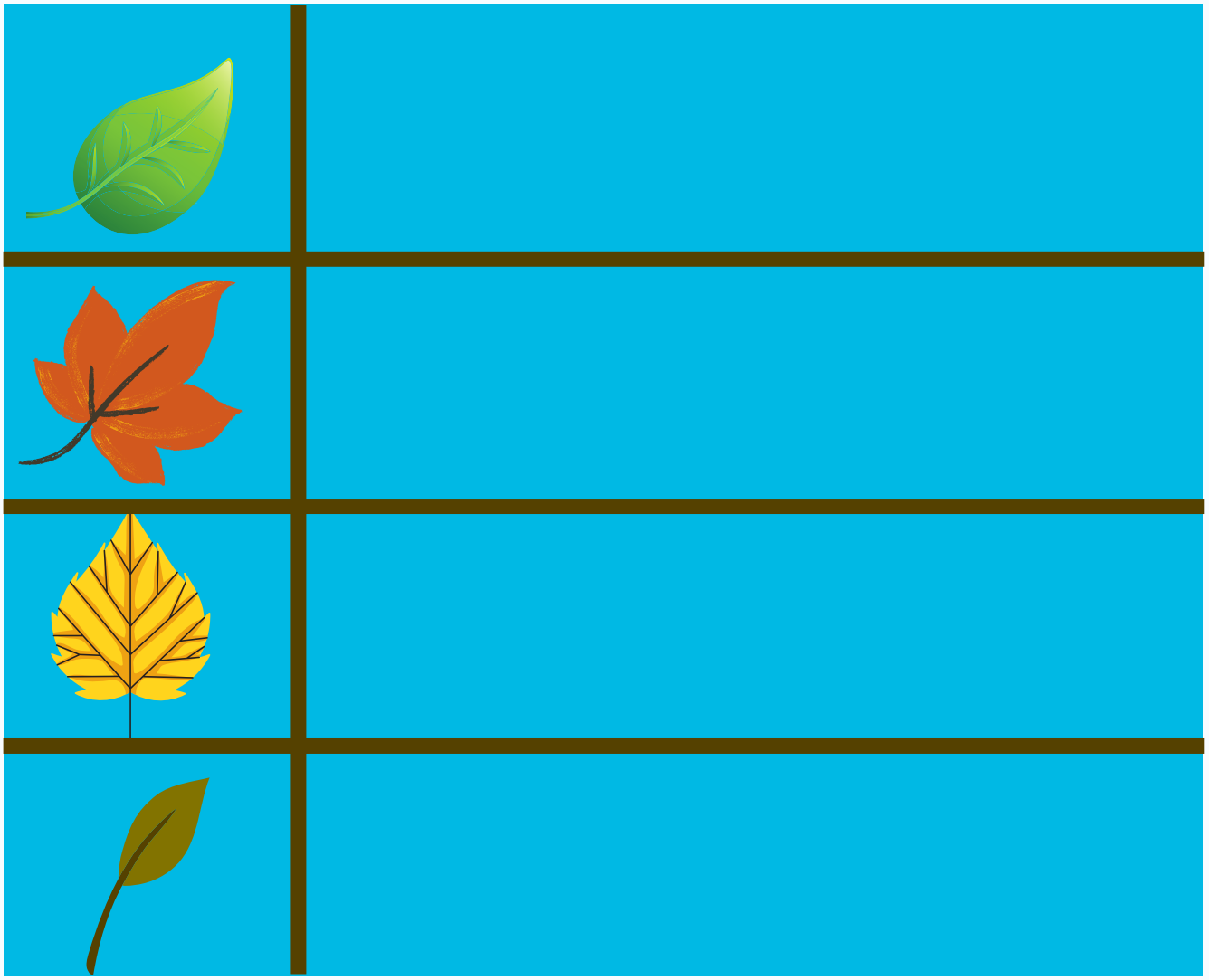
LEAF ANATOMY

DISSECT YOUR LEAF REVEALING THE PARTS

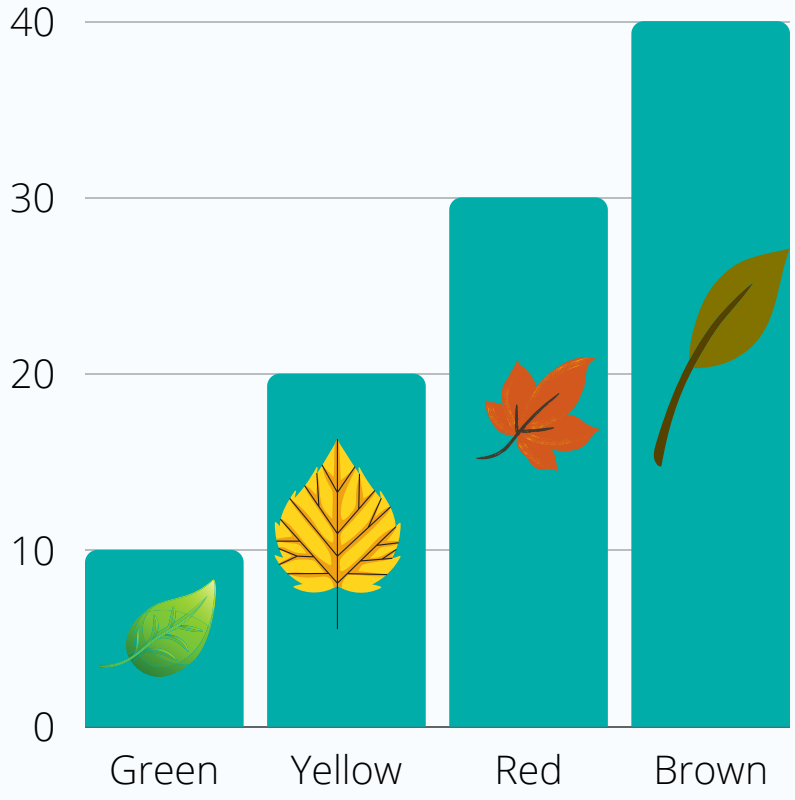
WHAT DO YOU THINK THEY DO?



TABULATE / CHART FINDINGS ON SHAPE / SIZE / COLOUR

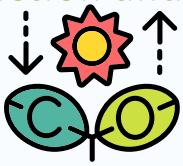


USE CHALK ON CONCRETE OR PAPER AND PENCIL



LEAF LITTER INFORMATION SHEET

A leaf is a powerful structure on plants and trees which can make food by converting light, transporting water and nutrients. They come in so many different shape, colours and sizes depending on the function and environment it lives in.



The basic anatomy of a leaf consists of:

- petiole (stalk) connecting the leaf to the stem allowing it to twist and stay attached
- lamina (leaf blade) is the surface area which has the chlorophyll (green pigment) which is involved in photosynthesis
- main vein and smaller side veins used for transporting water, nutrients and energy

Some trees lose their leaves because in Seasons where there is reduced light, the plant no longer photosynthesises and wants to conserve energy. The chlorophyll (green pigment) gradually decreases revealing the colours left behind such as red and yellow. Ultimately they dry out and turn brown. The trees also use this time to protect itself, as they shed their leaves the wind can pass through the branches more easily causing less damage.

Leaf litter forms on the ground as more and more leaves fall off trees, creating a habitat. Slugs, snails, worms, invertebrates like wood louse (slaters), millipedes, spiders and beetles are to name a few. The type and amount of organisms found, varies with time of year. Some animals spend their entire lives in soil and lead litter such as earthworms whereas others like using it for nesting and hibernating like our hedgehogs.

Don't be too tidy as leaf litter is food and shelter for insects and microbial life. Leaf litter also contributes to soil fertility and structure. As nutrients locked up in dead organic matter are released as they pass through the food chain.

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