The answers

Not every task has answers as some are guidance and others are practical tasks that depend on what you find. Where there are answers, we've included them below.

1. - The magic of trees

1.1 Tree of life

Pictured wildlife: honeybee, lawyer's wig (fungi), bluetit (bird), earthworm
Other wildlife supported by an oak could include: squirrel (red and grey), caterpillar, moth and butterfly (including purple hairstreak butterfly and dark-crimson underwing moth that rely solely on the oak tree), bee (inc the oak-mining bee), hoverfly, badger, wild boar, mouse (including woodmouse), birds (such as woodpecker, nuthatch, jay, rook, owl), aphids, beetles, ants, spiders, earthworms, bats, fungi (such as a bracket, penny bun, oakbun milcap), lichen, mosses, liverworts...to name but a few!

1.3 Benefits of trees

(Working clockwise from top left on the image) Relaxing and calming effect; creating shade and reducing the air temperature; useful building materials; producing food and furniture; increasing biodiversity and supporting wildlife; creating opportunities for fun and exercise!

1.4 Senses scavenger hunt

Again, the answers will be different for each person depending on where and when they complete their scavenger hunt, but nature-related answers may include:

- something patterned: tree bark, butterfly wings, acorn cup
- something moving: wildlife, grasses, trees or flowers in the wind
- something round: nut (such as hazel nut or horse chestnut), centre of a flower, petals
- something white: clouds, petals
- something dark: soil, tree bark, some leaves, some bird's feathers
- something that snaps: twig, branch, seed pod
- something that rustles: leaves in the wind, dry leaves on the ground
- an animal: birds, bees, flies
- something slimy: worm, snail
- something spiky: thorns, sweet chestnut seed case
- something bumpy: soil, path, gravel/ stones, tree bark
- something soft: leaves with hairs eg hazel
- something sweet: flowers
- something nasty: animal poo
- something earthy: soil

2. - Planning ahead

2.1 Right tree, right place

1 = Horse chestnut; 2 = Hawthorn; 3 = Alder; 4 = Rowan

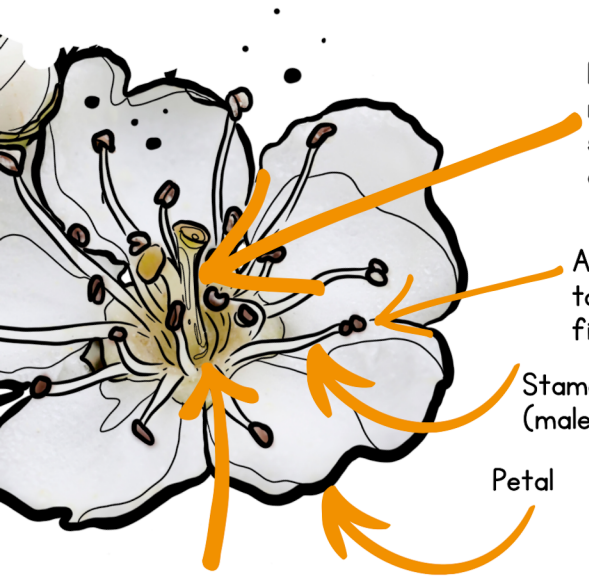
The answers

3. - How trees make seeds

3.1 Parts of a tree

(From top to bottom)
Leaves: produce energy for the tree
Flowers: attract pollinating insects
Seeds: produces new trees
Trunk: provides support for the tree and contains water and nutrient transport system
Roots: anchor the tree to the soil and absorbs water and nutrients

3.2 The pollen journey



Pistil (female parts made up of sticky sigma at the top of a long style)

Anther (on top of the filament)

Stamen (male parts)

Petal

Ovary (within the flower at the bottom of the style)

3.3 Hall of fame

If you're struggling to know what to draw, use the wildlife spotter in section I to find inspiration!

3.5 Seed match up

Acorn - nut - gravity/ animals
Sycamore - winged seed - wind
Alder - cone - wind
Hawthorn - fleshy fruit - animals

3.7 Tree timeline

The tree grows flowers - This stage is when the tree produces flowers as a way to reproduce.

Flowers are pollinated - This is the process of transferring pollen from the male part of a flower to the female part, which leads to fertilisation.

Seeds grow and are dispersed - This is where seeds grow and are spread away from the parent tree to find a suitable place to grow.

Seeds sprout - The seed begins to germinate and absorbs water and nutrients from the soil.

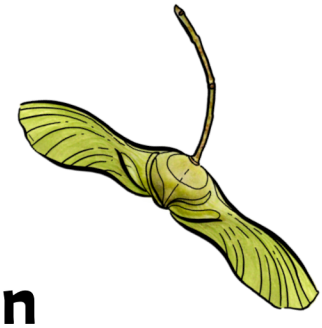
The sapling grows - A young tree starts growing from the germinated seed. It develops leaves and grows taller.

4. - Great Seed Gather

4.2 Seed categorisation challenge

Pods - labernum
Cones - alder, silver birch, scots pine
Fleshy fruits - hawthorn, wild cherry
Winged seeds - sycamore
Nuts - oak acorn, hazel, beech, horse chestnut

The answers



5. - Sowing the seed

5.2 Help your seeds grow

Give your seeds a breath of fresh air!

Seeds need water to quench their thirst

Other seeds prefer the comforting darkness

Some seeds love to bask in the sunlight

Keep your seeds cosy and warm

5.3 Spot the difference

The unhealthy tree is difference because it has:

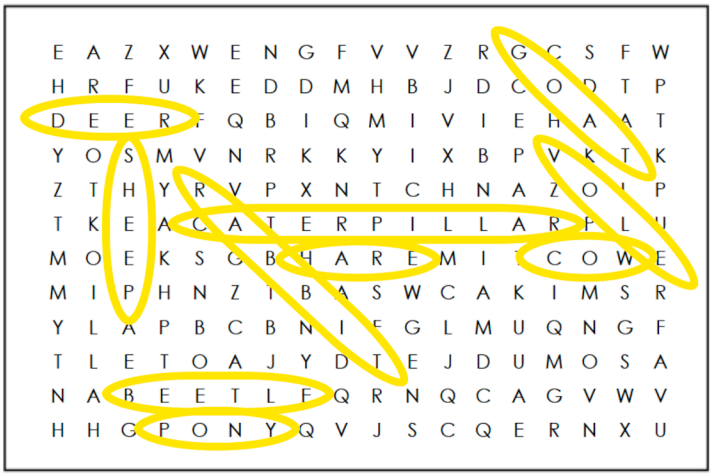
- no support (garden cane)
- no water (watering can)
- a smaller pot
- caterpillers eating the leaves
- yellowed leaves
- weeds growing in the pot

6. - Planting your tree

6.1 Arrange the steps

1. Allow your seedling to grow into small trees
2. Choose a well-drained site for planting
3. Plant a young tree from a pot/ Plant out your young tree from a root trainer/ Plant out your bareroot tree from a seed bed (these three can be in any order as they all happen at the same time)
4. Protect the newly planted tree from bark damage

6.4 Who's been damaging my tree?



6.4 Tree defender jumble

Fence defends against deer
Cardboard guard defends against rabbits
Mesh guard defends against mice and similar rodents
Disinfectant defends against disease spread

7. - Caring for your tree

7.5 Food chain challenge

There are lots of different possibilities but here are a few:
Cherry - blackbird - fox
Oak leaf - worm - hedgehog
hazelnut - mouse - owl
leaf - worm - toad
leaf - rabbit - fox