



Lesson 1: Design a Forest

Purpose

Explore some of the different processes and inter-relationships at work within the forest habitat.



Equipment needed:

- Resource Sheet 1
- Internet access to research links
- Large sheets of drawing paper and/or modelling equipment
- Sand or seed trays
- Soil
- Twigs and vegetation.

Optional equipment:

Parts of a tree such as leaves, seeds, blossom, twigs and bark can be used to explore the needs and functions of a tree.

What to do:

1. Brainstorm/Drama activity - briefly explore the life cycle of the tree.

Imagine you're a tiny seed in the forest. You want to grow into a big, strong tree.

How did you get here? (Talk about seed dispersal e.g. wind, insect, animal)

Are you in a good place to grow? (Talk about what you'll need - sunlight, air, soil, water)

Where will you get the energy to help you start growing? (Talk about the energy stored within seed)

You're a sapling (young tree). Where will you get the food you need to keep growing? (Talk about photosynthesis in leaves - process requires sunlight, air, water and nutrients in soil)

You're a big tree. How will you protect yourself against: storms, weeds, larger trees, animals, insects and/or people? (Talk about the strength and flexibility of wood allowing trees to withstand storms, growing tall to reach the light, thick canopies cutting out light for weeds, thick bark protecting the tree from insects, being valued by people because of your fruits, resins (e.g. rubber), bark (e.g. cork) or leaves or being able to survive pollarding or coppicing.)

Now you're ready to create your own seeds. What will you need? (Talk about blossoms, pollination and different types of seed dispersal e.g. wind or insects)

2. Pupils work in pairs to design their forests - either on paper or as a model. Ask them to make notes or sketch diagrams that explain different aspects of their design e.g. how the trees will attract pollinating insects. If the tree provides anything else that these insects need e.g. food, water, shelter? What will happen to the fallen leaves and branches?
3. Pupils use Resource Sheet 1 to refine their design by thinking about how their forest might address some of the issues in the list. Pupils might be asked to think about the answers before using the research links.
4. Plenary - invite pupils to share their ideas. What would life be like in a world without trees, woods or forests?