

## Forest for the Future – Explorer Backpack KS3

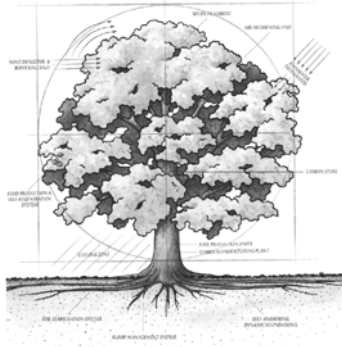
*This backpack contains a set of resources and activity ideas for you to explore the role trees play to help reduce climate change.*

### Item

### No. Activity Ideas

A tree's role

7 An introduction to trees and climate change.



A set of laminated diagrams that show the role of different parts of a tree in our changing climate. Look at the trees around you and discuss / discover their importance.

Carbon calculator sheet

7 Carbon calculator activity sheet – discover how much carbon a tree can store and therefore how much carbon dioxide it has removed from the atmosphere

Calculators



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Seed travel cards

Seed Travel Card	
Species:	Scots pine
Seed type:	winged seeds 
Dispersal method:	blown by the wind – its wing helps it to spin and travel further. Seeds are released on dry days when the cone scales open.
Distance covered:	up to 100m

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A set of cards for a selection of our native trees that helps to explore the current rate of climate change and which of our trees are most likely to successfully migrate / keep up with the changing conditions

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Discussion / extension questions included

Tape measure, rope, ribbons, and arrows

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To be used with seed travel cards - Create a scale version of these migration distances to visualise the problems our trees face and generate ideas to help our trees of the future

Forests for the future

Forest for the Future – Y5 & Y6

A piece of land becomes available to plant as a woodland, which choice should you make that would make it a woodland for the future, one that will help to reduce climate change?

Here are some questions for you to consider:

1. **What will you plant in your forest?**
  - One species of tree.
  - Native trees only.
  - A mixture of native and non-native species...
2. **What age of trees do you want in your woodland?**
  - Only young trees.
  - Only mature trees.
  - A mixture of both...
3. **What do you want to do with trees that have died naturally?**
  - Leave them where they are and remove from the forest and burn.
  - Remove from the forest to be used by someone else...
4. **You decide that you want to produce wood fuel. How will you do this?**
  - By coppicing the trees, leaving the stumps in the ground so the trees can grow again.
  - By cutting down the trees completely.
5. **The land is mostly flat with a couple of hills and a river running along a valley. Where will you plant your trees?**
  - Only on the flatter areas.
  - On the flat areas and hillsides.
  - On the flat areas, hillsides and along the riverbank.
6. **As the trees mature they can be used to make useful products. How will you plan to use them?**
  - Sell them all in one go.
  - Sell one third of them each year, rotating over a number of years.
  - Sell trees from when a section, thinning out the trees, not clearing the whole section.

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Design your own forest for the future, to best help reduce climate change – make a model using natural materials found on the woodland floor.

A series of multiple choice questions will provide focus for the forest's design, exploring age structure, species choice, sustainable timber production, hillside planting ... Info sheet included for teachers

