



Design a sustainable bird nest box

Research sustainable forests and timber, then produce a wooden bird nest box design and plan out how to build it.

While this activity doesn't gain you points on the award, it is excellent background for students and increases their engagement with woods and trees.



Curriculum requirements KS3

Students should have the opportunity to:

- use their creativity and imagination, design and make products that solve real and relevant problems within a variety of contexts, considering their own and others' needs, wants and values
- evaluate past and present design and technology, develop a critical understanding of its impacts on daily life and the wider world
- critique, evaluate and test their ideas and products and the work of others
- be taught the knowledge, understanding and skills needed to engage in an iterative process of designing and making.

Learning outcomes

After completing the activity, students should have:

- a better understanding of wood and how it is used
- discussed what items are made from wood in the classroom and in everyday life
- researched sustainable forests and timber production, for example the Forest Stewardship Council
- researched and produced a plan to make a bird nest box out of wood.



Preparation and resources

The following materials will help you deliver this activity successfully.

Outdoors – in a local woodland, park or your school grounds

- risk assessments
- health and safety equipment
- outdoor clothing and footwear suitable for all weathers

In the classroom

- AV equipment to show the film ‘What is ancient woodland?’
www.woodlandtrust.org.uk/trees-woods-and-wildlife/habitats/ancient-woodland/
- devices with internet access to view the bird next box tutorial
www.woodlandtrust.org.uk/blog/2021/02/how-to-build-a-nest-box-for-birds/ (this can be printed if access is unavailable in class)
- ‘What is a sustainable forest?’ [blog woodlandtrust.org.uk/blog/2018/07/what-is-a-sustainable-forest/](http://blog.woodlandtrust.org.uk/blog/2018/07/what-is-a-sustainable-forest/)
- plain A4 paper, pencils and rulers

Location

Different parts of this activity can be carried out in different places.



On a woodland visit

If possible, go to a wood before the lesson so you can discuss why British trees and woods are valuable to people and wildlife.



In your school grounds or a local park

Alternatively, go into your school grounds or a local park with trees before or as part of your lesson. Sit underneath some trees and discuss why British trees and woods are valuable.



In the classroom

All parts of this activity can be completed in class.



Starter activity (10 minutes)

Watch our video: What is ancient woodland?

Watch the film and ask students to discuss the following questions in pairs, before feeding back to the whole class:

- How is a British woodland valuable for wildlife?
- How is a British woodland valuable for people?
- What species of trees do we use for wood in the UK?

Main activity (40 minutes)

Students should discuss which objects are made of wood both in the classroom and in everyday life.

Ask students to research what wood is used for, where it comes from and how it is processed. They should also investigate the importance of sustainable forests and sustainable wood production.

In pairs or individually, students should follow the Woodland Trust bird nest box tutorial and design their own bird nest box on paper. Their plan should include accurate measurements.

Students should create an equipment list, methodology table and a summary poster showing where to place the bird box. They should also list the reasons why bird nest boxes benefit wildlife.

Plenary/evaluation (10 minutes)

To end the lesson, encourage students to share their plans with the class and explain how they have designed the box to benefit wild birds.



Extension

Students can further develop their skills by researching and designing other wooden structures that create habitats for wildlife, such as bug hotels and hedgehog houses.

Students can also design larger wooden structures, such as garden furniture and sheds that contain habitat features to help increase biodiversity in gardens and public open spaces.