

**Research**

Well-conducted research provides information about current users and competitors. It also gives insight into the latest design trends.

Birds aren't the only things that like to enter nest boxes; predators and insects may also take up residence.

Birds such as sparrows and starlings often take over nesting holes used by tits. A hole size of 25mm will exclude larger species. Do not fix a perch on the front of any box, as this will encourage intruders.

Birds don't need a perch in order to use the box.

By putting up nest boxes with different sized holes, you'll cater for a variety of species. Please remember that sparrows and starlings are in serious decline and may need help even more than the tits.

**Predators**

Nest box predators include cats, squirrels, rats, mice, stoats, weasels, woodpeckers and, in case of open fronted boxes, members of the crow family. As predators mainly hunt early in the morning, most people are unaware of their presence.

A metal plate fixed around the entrance hole may deter woodpeckers and squirrels, while barbed wired, gorse or rose clippings above and below the box will give some protection against most mammals, such as cats. Various commercially available deterrents may also help reduce predation.

**Assessing Risks**

A risk assessment involves looking closely at something and deciding if there are any hazards that may cause a risk to people. A risk assessment is used to figure out what needs to be done to prevent the risk from happening.

**Specification**

In order to optimise the project's efficiency, it is necessary to draw up a design specification which will detail the objectives, targets and restraints of the project. It is a document that may change as the project progresses and details your aspirations for the project.

A specification is a document that is used by designers to give them a list of criteria that they must stick to when designing a product. If a specification says that a product should have a certain feature and it does not, then the product would fail.

**6 R's of sustainability**

Sustainability means meeting our own needs without compromising the ability of future generations.

**RETHINK:** Design in a way that considers people and the environment.

**REUSE:** Use a product to make something else with all or parts of it.

**RECYCLE:** Reprocess a material or product and make something else.

**REPAIR:** When a product breaks down or doesn't work properly, fix it.

**REDUCE:** Cut down the amount of material you use.

**REFUSE:** Don't use a material or buy a product if it's bad for people or the environment.

**ACCESS FM**

**ACCESS FM** is the acronym for creating a great product in design technology,

**Research**

Well-conducted research provides information about \_\_\_\_\_. It also gives insight into the latest design \_\_\_\_\_.

Birds aren't the only things that like to enter nest boxes; \_\_\_\_\_s may also take up residence.

1. Birds such as \_\_\_\_\_ often take over nesting holes used by tits. A hole size of \_\_\_\_\_ will exclude larger species. Do not fix a \_\_\_\_\_ of any box, as this will \_\_\_\_\_. Birds don't need a perch in order to use the box.
2. By putting up nest boxes with different sized holes, you'll \_\_\_\_\_. Please remember that sparrows and starlings are in \_\_\_\_\_ and may need help even more than the tits.

**Predators**

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2. A \_\_\_\_\_ may deter woodpeckers and squirrels, while barbed wired, gorse or rose clippings above and below the box will give some \_\_\_\_\_, such as cats. Various commercially available deterrents may also help \_\_\_\_\_.

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\_\_\_\_\_: Design in a way that considers people and the environment.

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**Assessing Risks**

A risk assessment involves looking \_\_\_\_\_ at something and deciding if there are any \_\_\_\_\_ that may be cause a \_\_\_\_\_ to people. A risk assessment is used to figure out what needs to be done to \_\_\_\_\_ the risk from happening.

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## Topic: Birdbox Project

# Design Innovate

Research & exploration to understand & identify customer needs

RETRIEVE &  
APPLY.

### Assessing Risks

What are the benefits of producing a risk assessment?

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What could happen if there are wires hanging on to the walk area of the classroom? Why is this dangerous?

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What are the three main areas of a risk assessment and what do they mean?

1. \_\_\_\_\_ which means \_\_\_\_\_

2. \_\_\_\_\_ which means \_\_\_\_\_

3. \_\_\_\_\_ which means \_\_\_\_\_

### 6 R's of sustainability

Why are the 6 R's important when designing new products?

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Can you think of a product that:  
Could be rethought?

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Could be reused?

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Could be recycled?

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Could be repaired?

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### ACCESS FM

Join each ACCESS FM term to its correct description

Aesthetics

Impact the natural world

Cost

Dimensions of the product

Customer

Who will buy it

Environment

What it does and how it works

Safety

What it's made from and how it's made

Size

What it looks like

Function


How much is it sold for


Materials/  
Manufacture

Risks and dangers

### Tools & Equipment

Below are some of the tools you may use in DT. Can you identify their names, what it may be used for and features.

	Tool name: _____
Feature: _____ _____	Feature: _____ _____

	Tool name: _____
Feature: _____ _____	Feature: _____ _____

How would you hold a pair of scissors correctly?

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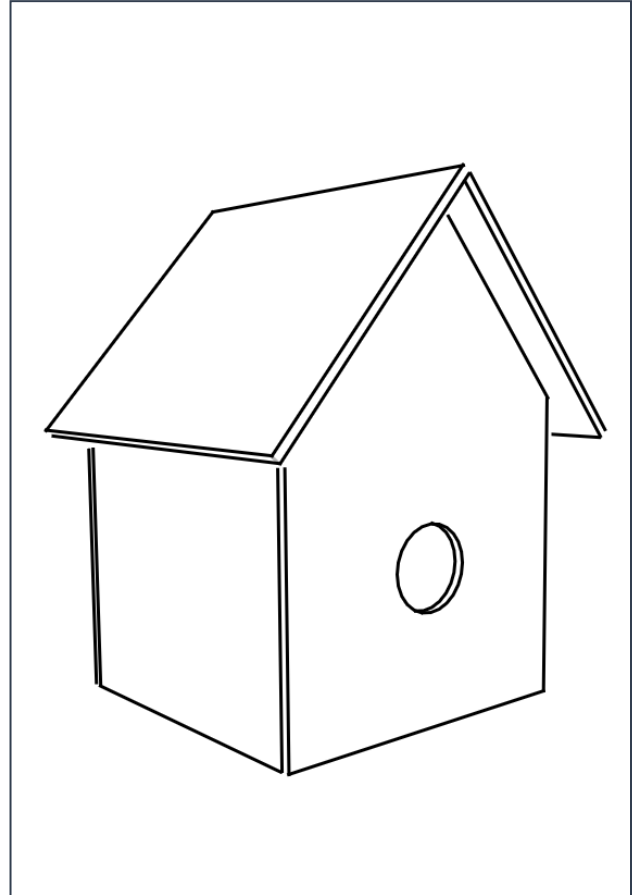
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**Design**

Designers ideas are constantly evolving and changing. No two designers work will be the same as they will both draw on different expertise and influencers as inspirations.

**Task - Design your birdbox in Pop Art Design with bright and vibrant colours**

- You must show a clear inspiration to Pop Art
- It must be decorated with VIBRANT colours



**CHALLENGE:** See if you can draw the sketch of the birdbox and then add detail with Pop Art print and vibrant colours in the box below.

