

End Points

Year 6 – Navigational tools



What I know and can explain

- To know that accelerometers can detect movement.
- To understand that sensors can be useful in products as they mean the product can function without human input
- Writing a design brief from information submitted by a client.
- Developing design criteria to fulfil the client's request.
- Considering and suggesting additional functions for my navigation tool.
- Developing a product idea through annotated sketches.
- Placing and manoeuvring 3D objects, using CAD.
- Changing the properties of, or combining one or more 3D objects, using CAD
- Considering materials and their functional properties, especially those that are sustainable and recyclable (for example, cork and bamboo).
- Explaining material choices and why they were chosen as part of a product concept.
- Programming an N,E, S, W cardinal compass
- Explaining how my program fits the design criteria and how it would be useful as part of a navigation tool.
- Developing an awareness of sustainable design.
- Identifying key industries that utilise 3D CAD modelling and explaining why.
- Describing how the product concept fits the client's request and how it will benefit the customer.

Useful vocabulary

3D CAD
application (app)
biodegradable
client
concept
feature
function
GPS tracker
Product lifecycle

sustainable design
unsustainable
design
variable
workplane

