

Year 6 - Digital World - Navigating The World - Term 3

Key Vocabulary

Materials that break down and form part of the soil as part of the natural Biodegradable decomposition process. A form of data, which consists of (true) Is and (false) Os values. Boolean Environmentally Does not cause harm to nature (animals. plants etc). friendly Finite Limited in number, will eventually run out. To instruct a program to respond based on two or more conditions (e.g. if it is below If statement 10 degrees celcius turn on the heating; else switch the heating off). Mouldable Can be made into any shape. How long an object is expected to last Product lifecycle before becoming unusable. How long an object will last, before being Product lifespan recycled. Smart A device with processing capabilities. Sustainable Can be maintained.

Sometimes we need multiple products to help us achieve something. This can be a lot to carry especially if you are trekking.





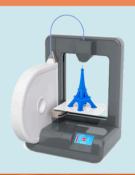
One electronic product with multiple functions could help lighten the load.

3D printing

A 3D printer can receive and output a 3D model file as a physical item.

It is very expensive to set up and fill with materials.

The models are restricted by the colour of the material the printer uses, but can be hand-painted after printing to add detail



Sustainable materials



Cork

Developed from living trees, without causing them harm. Cork comes from bark that regenerates.



Bamboo

Grows rapidly
- some
species will
reach 3 ft in
a single day.

What can you remember from previous units?

What navigation tools do you know? What is debugging?

Anything else you have learnt? What have you enjoyed?

To know statements

I know how to complete a design brief, referring to the

I know how to explain the choices they have made on their design brief.

I know how to write a program that displays an arrow to indicate cardinal compass directions, with an 'On start' loading screen.

I know how to identify 'bugs' in their program and suggest ways for how to fix them with adult or peer support.

I know reasons why some materials may be more appropriate than others for their navigation tools and I can use a template to develop a product concept.

I know what CAD modelling is and some of the benefits of it.

I know how to experiment with pulling apart and rebuilding Tinkercad remix projects.

I know how to use a product pitch guided plan and working as a team, identify key information about the product, referring back to the design brief for Adventure Awaits Co.