Medium Term Plan: Supporting Implementation of LTP/Progression Grid

Subject: Computing – Website Design: 3D Sustainable Products

Year: UKS2 – Year B – Spring

NC/PoS:

- Design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts
- Understand computer networks, including the internet; how they can provide multiple services, such as the World Wide Web, and the opportunities they offer for communication and collaboration
- Use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content
- Select, use and combine a variety of software (including internet services) on a range of digital devices to
 design and create a range of programs, systems and content that accomplish given goals, including
 collecting, analysing, evaluating and presenting data and information
- Use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact

Prior Learning (what pupils already know and can do)

What a device is, how they can be connected via a network and the internet, how the internet can be used to support collaborative learning

End Points (what pupils MUST know and remember)

- To know how use a search engine effectively
- To know the different methods used to communicate online
- To design and create a 3D model online
- To design and create an effective website

Key Vocabulary

web, search engine, refine, results, provider, web crawler, rank, influence, communication, email, messenger, social media, blog, vlog, share, private, 3D modelling, perspective, manipulate, combine, construct,

Recommended Resources:

https://tinyurl.com/UKS2-Weband3D-1

https://tinyurl.com/UKS2-Weband3D-4

https://tinyurl.com/UKS2-Weband3D-2

https://tinyurl.com/UKS2-Weband3D-5

https://tinyurl.com/UKS2-Weband3D-3

https://tinyurl.com/UKS2-Weband3D-6

Session 1: How can we search the web?

How can we use search engines? Are searches always accurate? How can refine our searches? Do different search engine provide the same results? What is the purpose of a web crawler? Why and how do search engines rank their results? How can search results be influenced? How can sites be optimised for searching? Are there limitation to what can be searched?

Vocabulary: web, search engine, refine, results, provider, web crawler, rank, influence,

Session 2: How can we communicate online?

How can we communicate using the internet? Are some methods more suitable than others? Should everything be shared via the internet? How can we keep online communication private?

Vocabulary: communication, email, messenger, social media, blog, vlog, share, private

Session 3: 3D Modelling

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What is 3D modelling? How can we view shapes in three dimension on a computer? How can we view 3D shapes from a different perspective? How can 3D objects be manipulated digitally? How can we combine 3D shapes? How is 3D modelling used in product design? Can we create 3D models of packaging?

Vocabulary: 3D modelling, perspective, manipulate, combine,

Session 4: Web Design

What makes a good website? What is HTML Code? How can layout impact a website? Why must we use copyright-free images? What is meant by the term 'fair use'? How can we plan a good website? How can we create a website in Google Sites? How can we make our website suitable for multiple devices? How can we make our website easy to navigate? How can we add hyperlinks to other sites?

Vocabulary: website, HTML, layout, copyright-free, fair-use, navigate, hyperlink?

Session 5: Sustainability Website

How can we create a website showing 3D models of sustainable products? How can we use known design features for easy navigation? What information will need to be included? Can we use Google Classroom to share images with our peers (each group can create a model of one of the seven wonders and gather information to share)?

Vocabulary: website, 3D model, navigate, share

Future learning this content supports:

The content of this unit will support other units on understanding of computing systems and online collaborative working, creating media and programming.