Declarative and Procedural Knowledge

Year 6

Contents

Introduction 3
Introduction to Purple Mash 4
Graphing 5
Blogging 6
Networks 7

Introduction

It is important to note that for simplicity and to demonstrate strand coverage, units have been put into their 'best fit' strand as per the Scheme of Work Overview document.

Key Stage 1

- In many units, children will be furthering online understanding and concepts of technology (DL) through making digital content (IT and CS)

Key Stage 2

- Children will develop an understanding of the capabilities of the World Wide Web (CS) while searching online (IT).
- They will be developing their understanding of appropriate behaviour online (DL) skills while learning about searching the internet (IT).

Both Key Stages

- At all times children will be learning about using technology safely and respectfully (DL).
- In most units for all strands, children will be developing their general information technology skills (IT).
- This overlap, repetition and reinforcement helps to give children a deeper understanding of the knowledge and skills across all strands and of their integrated nature in the real world.

*For more detailed information to assess pupils, see the assessment statements at the end of each unit and repeated in the Assessment document for each year group.

Introduction to Purple Mash

National Curriculum Links	**Dominant objectives for this unit:** 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.

Declarative - By the end of the unit the students **will know that**:	**Procedural** – By the end of the unit the students **will know how to**:
• It is important to log in to a site, the importance of keeping passwords safe and the need to log out at the end of a session.	• Access Purple Mash from home and school. • Log out of Purple Mash. • Give reasons why it is important to keep a password safe and not share it with other people.
• An avatar is a virtual representation of a person suitable for use online.	• Make and edit their own avatar.
• The 2Do system is used to set work for children within Purple Mash.	• Open 2Dos. • Save 2Dos. • Hand in 2Dos and communicate with their teacher via the 2Do.
• Online sites have a main page called the ***homepage***.	• Access the Purple Mash homepage when on the site.
• Online sites often use an alert system to communicate with the user.	• Access alerts within Purple Mash.
• To move to a different activity in Purple Mash, you must close the current activity.	• Close activities in Purple Mash.
• Many online sites, including Purple Mash, have an area for an individual's work that is accessible only to the individual (and in Purple Mash to their teacher as well).	• Access their work area. • Save work in their work area. • Locate and open work they have done previously in their work folder.
• To access Purple Mash programs, you use the Tools area.	• Open a specified tool.
• To access activities related to a specific topic, you can use the Topics area.	• Find activities on a specified topic.
• You can access non-visible parts of a screen using scrolling.	• Scroll up and down and from side to side where applicable.
• Purple Mash includes collaborative tools.	• Recommend a tool to use for collaborative group or class work.

Graphing

National Curriculum Links	**Dominant objectives for this unit:** • 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.

Declarative - By the end of the unit the students **will know that**:	**Procedural** – By the end of the unit the students **will know how to**:
• Graphing helps to make sense of datasets and draw conclusions related to the collected data	• Create a variety of graphs and interpret these to draw conclusions.
• There are different types of graphs. The data and the question that needs answering will determine the best graph type to produce.	• Create a variety of graph types and determine the best format to represent specified data.
• Comparative bar charts can be used to visually compare several datasets.	• Create a comparative bar chart using the 2Graph tool. • Present the graph with a title, key and axis labels.
• Graphs can be exported from a graphing tool such as 2Graph and imported into other documents.	• Export graphs from 2Graph and import them into a 2Publish file.
• Pie charts represent data as parts of a whole.	• Use 2Graph and 2Calculate to create pie charts and then interpret what they show. • Compare the use of each tool in relation to graph production.
• Line graphs are used to represent the relationship between two variables as they change over time.	• Decide when a line graph would be the most appropriate graphing format. • Create line graphs and use a graphing tool to add titles, labels and select the best scale for display. • Create line graphs showing multiple datasets and use these to draw conclusions about the data.

Blogging

National Curriculum Links	**Dominant objectives for this unit:** • 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.

Declarative - By the end of the unit the students **will know that**:	**Procedural** – By the end of the unit the students **will know how to**:
• A blog is a regularly updated webpage, written about a particular topic.	• Give examples of topics for existing or prospective blogs.
• Blogs consist of several blog posts	• Create a blog post.
• A well written blog post has certain features that make the blog clear and easy to understand and increase reader engagement.	• Plan the hook, look and feel, conclusion and reader engagement for a blog post.
• The 'hook' draws the reader into the blog.	• Use an appropriate hook for a blog post by including either a quote, a story, a question or an observation to grab the reader's interest.
• The look and feel of a blog post makes it clear for the reader to access the information.	• Write a blog post that is easy to follow, uses lists or bullets, bolds key information and uses an appropriate conversational style.
• The conclusion of a blog post ties the information in the post together.	• Write a conclusion that summarises the main points of the post and might give the reader advice.
• The process of writing a blog post requires planning, drafting, revising and editing before publication.	• Follow the plan, draft, revise and edit process before publishing a blog post.
• Engaging with readers is crucial to the success of a blog.	• Read and respond to comments on their blog post. • Use commenting to increase engagement and guide future blog posts.
• Moderation exists to make the blogging environment a safe place for its readership and authors.	• Decide whether content conforms to appropriate netiquette guidance. • Report posts or comments that violate community or legal guidelines.

Networks

National Curriculum Links	**Dominant objectives for this unit:** • Design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts. • Use sequence, selection, and repetition in programs; work with variables and various forms of input and output. • Use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs.

Declarative - By the end of the unit the students **will know that**:	**Procedural** – By the end of the unit the students **will know how to**:
• A network describes a group of connected computers that can share information and hardware resources.	• Identify types of computer networks locally and globally. • Explain the hardware resources that a network might share.
• LAN and WAN are different kinds of networks,	• Explain the difference between LAN and WAN.
• Certain hardware is required to create a network.	• Create a network diagram that include hardware such as a router and connected devices and peripherals.
• Networks can be wired or wireless or a combination of both.	• Identify the terms wi-fi, mobile data and 5G as pertaining to wireless network connections.
• The difference between the World Wide Web and the Internet.	• Describe the difference between the Internet and World Wide Web giving examples of the services that both provide.
• Web browsers are used to access the World Wide Web.	• Give examples of web browser tools.
• The existence of networks has opened online communication	• Give examples of online communication. • Give safety tips related to online communication
• Internet filtering and censorship are both used to make parts of the internet less accessible for different reasons.	• Explain the differences between Internet filtering and censorship and why they are used.