

## Unit: 3.1

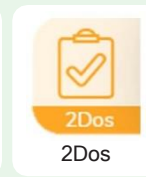
### Key Learning

- To understand what a flowchart is and how flowcharts are used in computer programming.
- To understand that there are different types of timers and select the right type for purpose.
- To understand how to use the repeat command.
- To understand the importance of nesting.
- To design and create an interactive scene.

### Key Resources



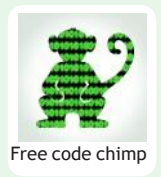
Tools



2Dos



2Chart



Free code chimp

### Key Vocabulary

#### Action

Types of commands, which are run on an object. They could be used to move an object or change a property.

#### Alert

This is a type of output. It shows a pop-up of text on the screen.

#### Algorithm

A precise step by step set of instructions used to solve a problem or achieve an objective.

#### Background

The part of the program design that shows behind everything else. It sets the scene for the story or game.

#### Blocks of Command

A series of a few code instructions.

#### Button

An object that can trigger an event in response to being clicked.

#### Collision Detection

Detecting when two characters on the screen touch each other.

#### Command

A single instruction in a computer program.

#### Debug/Debugging

Looking for any problems in the code, fixing and testing them.

#### Develop

The process of designing programs and writing code.

#### Event

Something that causes a block of code to be run.

#### Execute

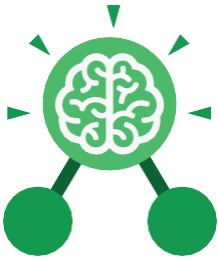
To run a computer program.

#### Flowchart

A diagram which represents an algorithm.

#### Nesting

When you write a command inside something else e.g. a block of commands could be nested inside a timer.



## Unit: 3.1

### Key Vocabulary

#### Object

An element in a computer program that can be changed using actions or properties. In 2Code, buttons, characters and vehicles are types of objects.

#### Output

Information that comes out of the computer e.g. sound.

#### Plan

Set out what you would like the program to do before it is written.

#### Predict

Say what you think will happen when a piece of code is run.

#### Procedure

A set of coded instructions that perform a certain task.

#### Properties

All objects have properties that can be changed in design or by writing code e.g. image, colour and scale properties.

#### Repeat

This command can be used to make a block of commands run a set number of times or forever.

#### Sequence

when a computer program runs commands in order.

#### Scene

A visual aspect of a program.

#### Sound

This is a type of output command that makes a noise.

#### Test

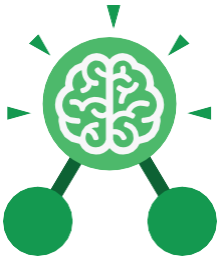
When code is run to check that it works correctly.

#### Timer

Use this command to run a block of commands after a timed delay or at regular intervals.

#### Values

Usually a number, a single character or a string of characters.



## Unit: 3.1 Coding

### Key Images



Open, close or share a file.



Save your work.



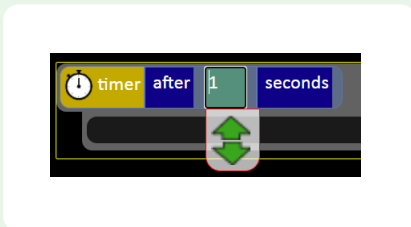
Design

Open design mode in 2Code.

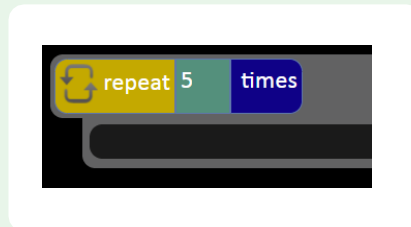


Exit Design

Switch to code mode in 2Code.



A timer code block.



Repeat block.

### Key Questions

Why is it useful to use a flowchart to design a computer program?

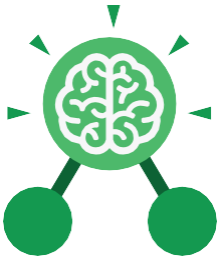
Using a flowchart to design a computer program is helpful as you can see it in its simplest form as inputs and outputs. You can see where the program is going which will prevent mistakes when creating the code.

What does repeat mean in computer programming?

Using the repeat command will make a block of commands run for a set number of timers or forever. These saves rewriting the code many times.

What is the difference between 'timer after' and 'timer every'?

A 'timer after' means after a certain amount of seconds, the action will occur. 'Timer every' means that the action will re-occur every certain amount of seconds on a loop.



## Unit: 3.4

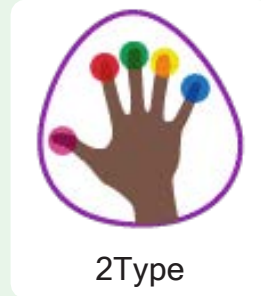
# Touch Typing

### Key Learning

- To introduce typing terminology.
- To understand the correct way to sit at the keyboard.
- To learn how to use the home, top and bottom row keys.
- To practise typing with the left and right hand.

### Key Resources

**purple  
mash**



### Key Vocabulary

#### Posture

The correct way to sit at the computer.

#### Top row keys

The keys on the top row of the keyboard.

#### Home row keys

The keys on the middle row of the keyboard.

#### Bottom row keys

The keys on the bottom row of the keyboard.

#### Space bar

The bar at the bottom of the keyboard.

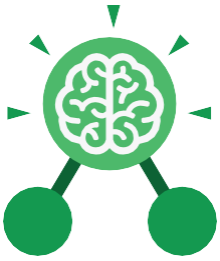
### Key Questions

#### Why should I have a good posture at the computer?

A good posture is important to help you avoid any injuries that come from repeatedly using the computer incorrectly.

#### Why should I type certain keys with certain fingers?

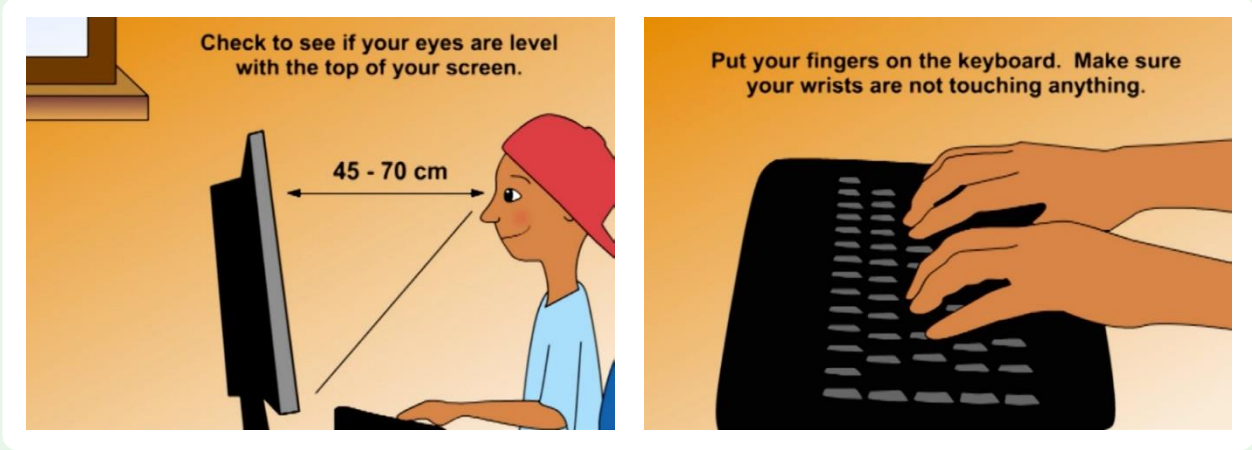
Using specific fingers for specific keys allows you to type more quickly.



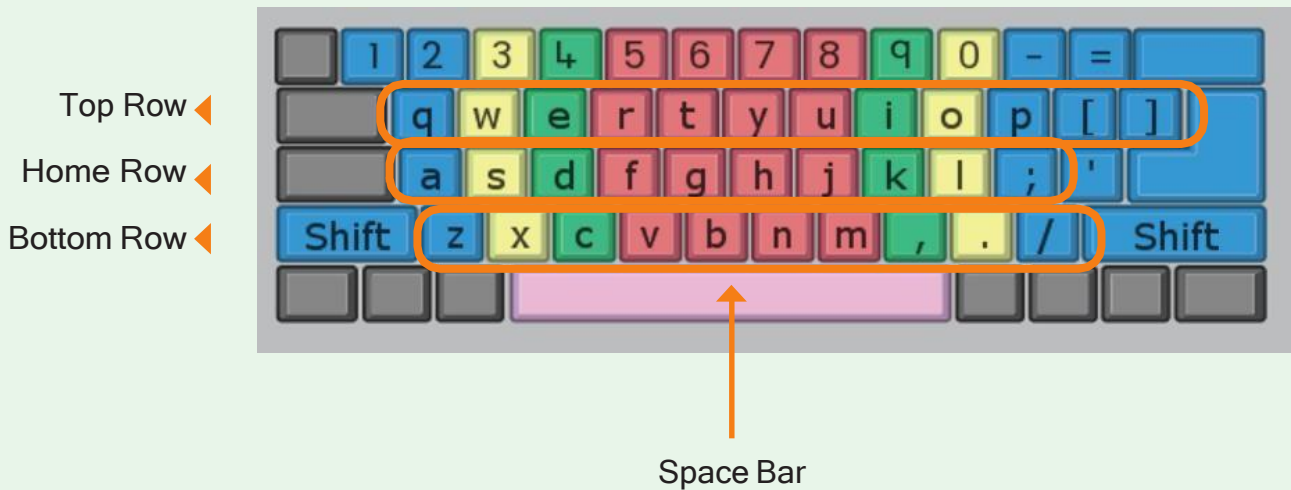
# Unit: 3.4

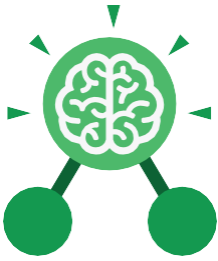
## Touch Typing

### Key Images



Posture





## Unit: 3.5

### Email

#### Key Learning

- To think about different methods of communication.
- To open and respond to an email using an address book.
- To learn how to use email safely.
- To add an attachment to an email.
- To explore a simulated email scenario.

#### Key Resources



2Email



2Connect



2Do It Yourself

#### Key Questions

##### What is email?

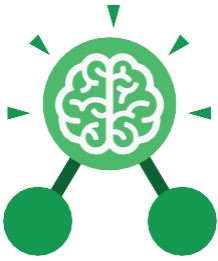
Email is a method of sending electronic communication from one device to another.

##### What should I do if I receive an email that makes me upset or scared?

If you are at school, you should tell the teacher immediately. If you receive the message at home, then you should tell a parent or guardian.

##### What information can I send in an email?

As well as sending a message, files such as photographs, videos, music and other resources can be attached to the email and sent to the receiver.



## Unit: 3.5

### Email

#### Key Vocabulary

##### Communication

The sharing or exchanging of information by speaking, writing, or using some other medium such as email.

##### Email

Messages sent by electronic means from one device to one or more people.

##### Compose

To write or create something.

##### Send

To make an email be delivered to the email address it is addressed to.

##### Report to the teacher

A way in 2Email to tell the teacher if you have received an email that makes you feel upset or scared.

##### Attachment

A file, which could be a piece of work or a picture, that is sent with the email.

##### Address book

A list of people who you regularly send an email to.

##### Save to draft

Allows you to save an email that you are working on and send it later.

##### Password

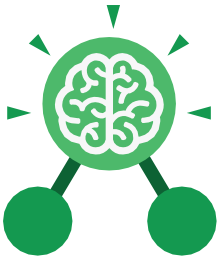
A secret word, phrase or combination of letters, numbers and symbols that must be used to gain admission to a site or application such as email.

##### CC

A way of sending a copy of your email to other people so they can see the information in it.

##### Formatting

Allows you to change the way the text of an email looks. For example, you can make the text bold or underline it.



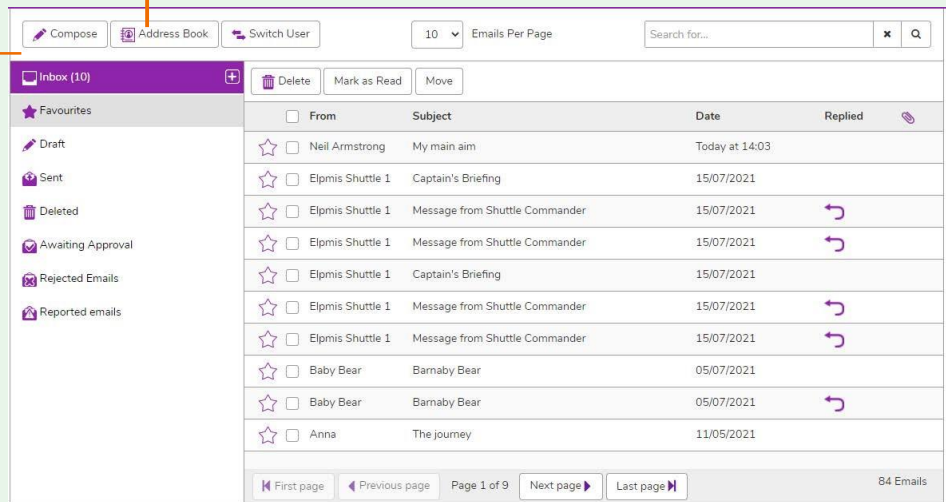
# Unit: 3.5

## Email

### Key Images

A list of people you have sent emails to before

Click here to write your email

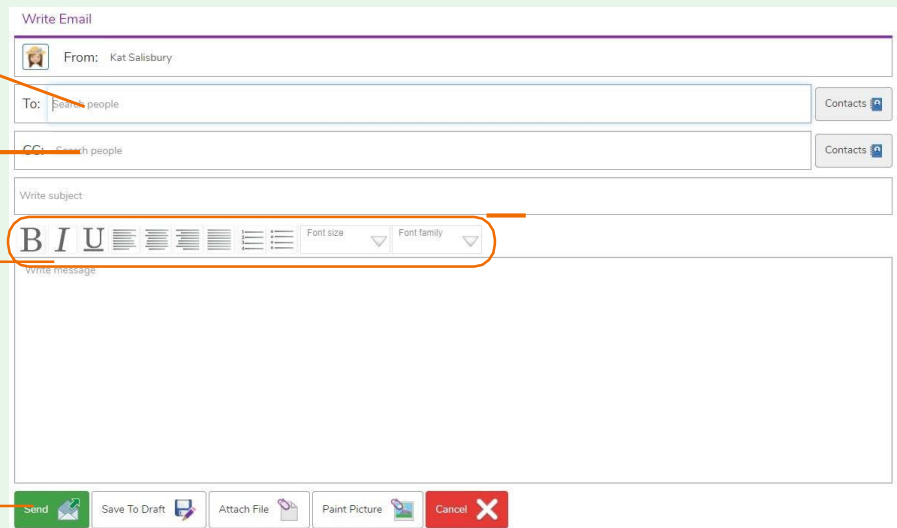


Formatting bar where you can change how the message looks.

Who is the email to be sent to?

Who else will the email be sent to?

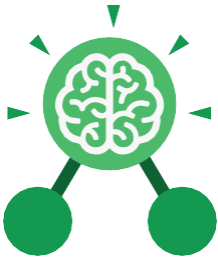
What is the email about?



Click this button to send the email.

Allows you to attach work and pictures to the email





## Unit: 3.9

# Presenting with Google Slides

### Key Learning

- To understand the purpose of the Slides tool.
- To add slides to presentations.
- To add media to presentations.
- To format text appropriately.
- To add shapes and lines to enhance a presentation.
- To use the skills learnt to design and create an engaging presentation.

### Key Resources



Google Slides

### Key Images



Open a new document

Share

Access sharing options



Return to slides home



Undo key

Arial



Text formatting



Insert a text box



Insert image



Insert shape



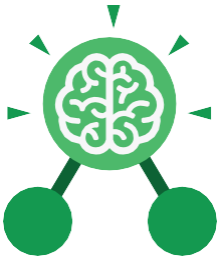
Insert line



Word art



Insert a new slide



## Unit: 3.9

# Presenting with Google Slides

### Key Vocabulary

#### Animation

Visual effects used on objects such as text boxes or pictures. They allow these objects to be brought on and off the slide in a certain way.

#### Presentation

A visual way of displaying information to an audience that is clear and engaging. It can contain text, images, and videos.

#### Text box

A box in which text can be inputted and formatted.

#### Design Themes

A variety of ready-made templates with custom formatting (font, colour scheme etc.) which gives a certain look and feel.

#### Presentation Program

A computer program, such as Google - 3.9 (Google) Slides, which is used to create a presentation.

#### Text formatting

When you change the format of text on a page, including the font, the size and whether it is bold, underlined or in italics.

#### Font

A set of type which shows words and numbers in a particular style and size.

#### Slide

A single page within a presentation.

#### Transition

The interesting effect used when one slide moves onto the next.

#### Media

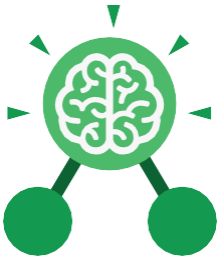
Images, videos, or sounds which can be added to a presentation.

#### Slideshow

A collection of pages arranged in sequence that contains text and images to present to an audience. Often referred to as a Slides presentation.

#### WordArt

A way to treat text as a graphic so that you can add special effects to text.



## Unit: 3.9

# Presenting with Google Slides

### Key Questions

#### What is a presentation program used for?

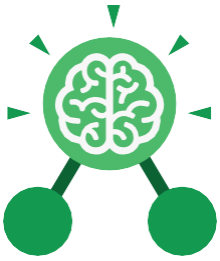
A presentation program is used to present information to an audience in an engaging way, such as including text, pictures and videos. Google Slides is an example of a presentation program.

#### How do you add a transition to a presentation?

Click on 'Transitions' at the top of the screen and select the transition you wish to use from the Motion menu. Choose the speed that you think will look best.

#### What features can you use to make a presentation more engaging?

You can give your presentation an engaging look and feel by using different fonts, colour schemes and using an interesting layout. Adding pictures, sound, and videos would also make a presentation more interesting to an audience. Using animations and interesting transitions between slides would also be engaging.



## Unit: 3.9

# Presenting with Microsoft PowerPoint

### Key Learning

- To understand the uses of PowerPoint.
- To create a page in a presentation.
- To add media to a presentation.
- To add animations to a presentation.
- To add timings to a presentation.
- To use the skills learnt to design and create an engaging presentation.

### Key Resources



### Key Images



Open a new document



Open an existing document



Save your work



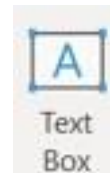
Undo key



Font Category



Insert a new slide



Insert a text box



Home tab where many editing tools are found



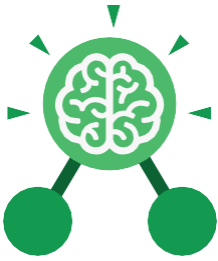
Insert a picture



Design tab where you can find ready-made design templates



Insert tab where you can add an object such as a picture or shape



## Unit: 3.9

# Presenting with Microsoft PowerPoint

### Key Vocabulary

#### Animation

Visual effects used on objects such as text boxes or pictures. They allow these objects to be brought on and off the slide in a certain way.

#### Audio

Any type of sound, such as music or voiceover.

#### Design Templates

A variety of ready-made templates with custom formatting (font, colour scheme etc.) which gives a certain look and feel.

#### Entrance Animation

The animation used to bring an object (such as a picture or text box) onto the slide.

#### Font

A set of type which shows words and numbers in a particular style and size.

#### Media

Images, videos or sounds which can be added to a presentation.

#### Presentation

A visual way of displaying information to an audience that is clear and engaging. It can contain text, images and videos.

#### Presentation Program

A computer program, such as PowerPoint, which is used to create a presentation.

#### Slide

A single page within a presentation.

#### Slideshow

A collection of pages arranged in sequence that contains text and images to present to an audience. Often referred to as a PowerPoint presentation.

#### Stock image

Existing photos and images which are available and free to use.

#### Text box

A box in which text can be inputted and formatted.

#### Text formatting

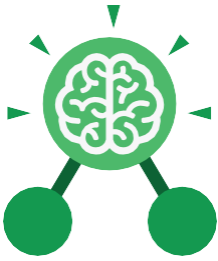
When you change the format of text on a page, including the font, the size and whether it is bold, underlined or in italics.

#### Transition

The interesting effect used when one slide moves onto the next.

#### WordArt

A way to treat text as a graphic so that you can add special effects to text.



## Unit: 3.9

# Presenting with Microsoft PowerPoint

### Key Questions

#### What is a presentation program used for?

A presentation program is used to present information to an audience in an engaging way, such as including text, pictures and videos. PowerPoint is an example of a presentation program.

#### How do you add a transition to a presentation?

Click on 'Transitions' at the top of the screen and select the transition you wish to use. You can preview the transition by pressing 'preview' on the left-hand side.

#### What features can you use to make a presentation more engaging?

You can give your presentation an engaging look and feel by using different fonts, colour schemes and using an interesting layout. Adding pictures, sound, and videos would also make a presentation more interesting to an audience. Using animations and interesting transitions between slides would also be engaging.