# Year A KS2



## Computing Vocabulary - Unit: 3.2 Online safety

Appropriate
When using online
services such as blogging
or sharing information. It's
important that users
behave appropriately.
Users should be truthful,
respectful, kind, seek any
permissions and report
anything they feel
uncomfortable with.

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 a website. Blog

A regularly updated website or web page, typically one run by an individual or small group, that is written in an informal or conversational style.

Personal Information

This is information that is personal to someone. For example, their favourite food, their name and age.

Reputable source

Reputable sources are known places or sites that have accurate information. For example, well known news sites or encyclopaedias.

Inappropriate

Behaviour or content online that is upsetting, rude, unkind or makes someone feel unsafe or concerned.

Internet

A global computer network providing a variety of information and communication facilities, consisting of interconnected networks and computers.

Permission

When someone shares or accesses content online, it's important that permission is given if it belongs to someone else or has information about them. Verify

When seeking content online, it is important that a user verifies the information. They can do this by checking other sources and looking for signs that may indicate inaccuracy in the information.

Reliable Source

A source of information that provides thorough, well-reasoned details based on valid evidence.

Website
A set of related web
pages located under a
single name.

Spoof

An imitation of something that appears to look genuine.

Vlo

A personal website or social media account where a person regularly posts short videos.



### Computing Vocabulary - Unit: 5.6 3D modelling

2D

Something that has only two dimensions; height and width.

### CAD – Computer aided Design

A CAD computer program or app allows you to design a 3D object or environment in 2D and visualise it in 3D on the screen from many angles.

#### Pattern Fill

A tool where you can add a customised repeating pattern to the surface of the net. 3D

Something that has three dimensions; height, width and depth.

### **Design Brief**

A document for a design project, defining the core details, including the goal and strategy.

#### **Points**

The points on a 3D net which create the corners of the 3D shape.

### **3D Printing**

The action or process of making a physical object from a three-dimensional digital model, typically by laying down many thin layers of a material in succession.

#### Net

What a 3D shape would look like if it was unfolded and opened out flat.

### **Template**

Something that serves as a model for others to copy and edit.



## Computing Vocabulary - Unit: 3.4 Touch typing

**Posture** 

The correct way to sit at the computer.

Keys

Buttons that are pressed on a computer keyboard or typewriter. These can be described by their position; bottom row, top row and home row (middle row).

Space bar

The bar at the bottom of the keyboard.

Typing

The action or skill of writing something by means of a typewriter or in this case a computer.

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.



### Computing Vocabulary - Unit: 4.6 Animation

### **Key Vocabulary**

Animation

The process of adding movement to still objects.

Onion Skinning
A process where the shadow image of the previous frame is present to help you line up the objects of the animation correctly.

FPS (Frames Per Second)
The number of frames played per second.

Pause
To temporarily stop the animation.

A single image in an animation.

A technique whereby the camera is repeatedly stopped and started, for example to give animated figures the impression of movement.



### Computing Vocabulary - Unit: 6.4 Blogging

Approval
The act of
acknowledging
something is
appropriate.

Blog post
A piece of writing or

A piece of writing or other item of content published on a blog. Archive
In this case, where older blog or vlog posts are stored.

Collaborate
Work jointly on an activity or project.

Vlog

A personal website or social media account where a person regularly posts short videos.

A regularly updated
website or web page,
typically one run by an
individual or small
group, that is written
in an informal or
conversational style.

Commenting

To express an opinion or reaction in speech or writing.



### Computing Vocabulary - Unit: 4.7 Effective searching

Presenting opposing points of view fairly and without bias.

Easter eggs

An unexpected or undocumented featur
in a piece of computer software or on a

DVD, included as a joke or a bonus.

A global computer network providing a variety of information and communication facilities.

Key words

A word or a group of words an Internet user uses to perform a search in a search engine.

# Reliability

The degree to which the result of something can be depended on to be accurate.

## Results page

Where the answers to a search are displayed.

# Search engine

A program that searches for and identifies items in a database. Used especially for finding sites on the World Wide Web.



## Computing Vocabulary - Unit: 3.3 Spreadsheets

#### Key Vocabulary

Advance mode

A mode of 2Calculate in which the cells have references and can include formulae.

A collection of information, especially facts or numbers, obtained by observation, questions or measurement to be analysed and used to help decision-making.

C Less Than

This symbol shows that a number to the left of it has less value than one to the

right.

Bar graph
A chart that uses bars to show quantities or numbers, so they can be easily compared.

Cell Address
Every cell has an address. This can be found by reading the column letter then row number.

Lettered, vertical reference points for the cells in a spreadsheet.

More Than
This symbol shows that a number to the left of it has greater value than one to the right.

Equals

This symbol shows that numbers or number sentences either side are equal in value.

Rows
Numerical, horizontal reference points for the cells in a spreadsheet.

More than, Less than & Equal Tool

This highlights either more than (>), less than (<) or equals (=) symbols according to which numbers are either side of it.

Pie Chart

A circular chart divided into segments which each represent a part of the total amount.

A computer program that represents information in a grid of rows and columns. Any cell in the grid may contain either data or a formula that describes the value to be inserted based on the values in other cells.

Quiz Tool

This can be used after the equals sign or instead of a number in a calculation. If you input the correct answer it will disappear.

An organised display of information laid out in rows and columns.

Spin Tool
Clicking on this in a cell
will increase or decrease
the value in the cell to the
right by 1.



## Computing Vocabulary - Unit: 4.3 Spreadsheets

#### **Key Vocabulary**

Data
A collection of information, especially facts or numbers, obtained by observation, questions or measurement to be analysed and used to help decision-making.

The way that data is displayed in a cell. For example using units such as £ or \$.

Percentage
per' 'cent' means
number of parts per
hundred.

The position of a digit to the right of a decimal point. In 2Calculate, the number of decimal places to be displayed can be chosen.

Use the formula wizard or type into the formula bar to create a formula in a cell, this will calculate the value for the cells based upon the value of other cells in the spreadsheet.

Tests whether the entered calculation in the cells to the left of the tool has the correct answer in the cell to the

right of the tool.

Line graph

A line graph is used to
display information which
can change over time. For
example, temperature at
different times of the day.

Random Number Tool
This tool, when clicked,
will generate a random
number.

Timer
When placed in the spreadsheet, clicking the timer adds 1 to the value of the cell to its right every second until it is clicked again.

Spin Tool

This tool changes a number to the right of it by one each time an arrow is pressed.

Place value

This is the value of each digit within a number.

For example 354, the 3 = 3 hundreds, the 5 = 5 tens and the 3 = 3 ones.



### Computing Vocabulary - Unit: 5.3 Spreadsheets

**Key Vocabulary** 

Rows
Boxes running
horizontally in a
spreadsheet.

A collection of information, especially facts or numbers, obtained by observation, questions or measurement to be analysed and used to help decision-making.

Advance mode
A mode of 2Calculate in
which the cells have
references and can
include formulae.

A computer program that represents data in cells in a grid of rows and columns. Any cell in the grid may contain either data or a formula that describes the value to be inserted based on the values in other cells.

Format
The way that text looks.
Formatting cells is helpful for interpreting a cell's contents for example you might want to format a cell to show a fraction e.g. 4 ½ or include units such as £ or \$.

Columns

Boxes running vertically in a spreadsheet.

A group of letters, numbers, or other symbols which represents a scientific or mathematical rule. The plural of formula is formulae.

An area of the spreadsheet into which formulae can be entered using the '=' sign to open the fomula.

Formula Wizard
The wizard guides you in creating a variety of formulae for a cell such as calculations, totals, averages, minimum and maximum for the selected cells.

Adds up the value of every cell above it, next to it or diagonal to it according to which total tool is selected.

'How Many?' Tool
Counts how many of a
variable there are in a
spreadsheet.

Used in computing to keep track of things that can change while a program is running.



## Computing Vocabulary - Unit: 6.3 Spreadsheets

#### **Key Vocabulary**

Rows
Horizontal, numbered
reference points for the
cells in a spreadsheet.

Data
A collection of information, especially facts or numbers, obtained by observation, questions or measurement to be analysed and used to help decision-making.

Move cell tool

Allows selected cells to be draggable.

Spreadsheet
A computer program that represents data in cells in a grid of rows and columns. Any cell in the grid may contain either data or a formula that describes the value to be inserted based on the values in other cells.

Probability
The extent to which an

The extent to which an event is likely to occur, measured by the ratio of the favourable cases to the whole number of cases possible.

Columns

Vertical, lettered reference points for the cells in a spreadsheet.

A group of letters, numbers, or other symbols which represents a scientific or mathematical rule. The plural of formula is formulae.

Money that is earned in trade or business after paying the costs of producing and selling goods and services.

Advance mode

A mode of 2Calculate in which the cells have references and can include formulae.

Count (How Many) Tool
Counts how many of a
variable there are in a
spreadsheet.

Dice Tool
Simulates the roll of a
die to a random number
between 1 and 6 when
you click on it.

The way that text looks.
Formatting cells is helpful for interpreting a cell's contents for example you might want to format a cell to show a fraction e.g. 4 ½ or include units such as £ or S.

The amount of money available to spend on a project.

include graphs and other diagrams such as pie charts or flowcharts.

A cost associated with a project.

A diagram that

represents data. Charts

An area of the spreadsheet into which formulae can be entered using the '=' sign to open the fomula.

Formula Wizard
Helps a user create
formulas which perform
calculations on selected
cells. For example,
adding, multiplying,
average, total.



## Computing Vocabulary - Unit: 4.7 Effective searching

**Key Vocabulary** 

Balanced View

Presenting opposing points of view fairly and without bias.

O Internet

A global computer network providing a variety of information and communication facilities.

Easter eggs
An unexpected or undocume

An unexpected or undocumented feature in a piece of computer software or on a DVD, included as a joke or a bonus.

O Key words

A word or a group of words an Internet user uses to perform a search in a search engine.

 $\circ$ 

Search engine

A program that searches for and identifies items in a database. Used especially for finding sites on the World Wide Web.

O

Reliability

The degree to which the result of something can be depended on to be accurate.

Results page

Where the answers to a search are displayed.



**Key Vocabulary** 

#### Action

The way that objects change when programmed to do so. For example, move 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

In 2Code the background is an image in the design that does not change.

#### Bug

A problem in a computer program that stops it working the way it was designed.

#### Button

A type of object that responds to being clicked on.

#### Click Event

An event that is triggered when the user clicks on an object.

#### Code

Writing the code for a computer program.

### Collision Detection Even

The event of two objects colliding.

#### Command

A single instruction in a computer program.

### **Debug/Debugging**

Fixing code that has errors so that the code will run the way it was designed to.

#### Eve

An occurrence that causes a block of code to be run. The event could be the result of user action such as the user pressing a key (when Key) or clicking or swiping the screen (when Clicked, when Swiped). In 2Code, the event commends are used to create blocks of code that are run when events happen.

#### Nesting

When coding commands are put inside other commands. These commands only run when the outer command runs.

#### Properties

These determine the look and size of an object. Each object has properties such as the image, scale and position of the object.

#### Sequence

When a computer program runs commands in order.

#### Turtle Object

A type of object in 2Code that moves by coding angles of rotation and distance to move.

### Flowchart

A diagram which represents an algorithm.

#### Input

Information going into the computer. Can include moving or clicking the mouse, using the keyboard, swiping and tilting the device.

#### Oblect

Items in a program that can be given instructions to move or change in some way (action). In 2Code Gibbon, these include character, turtle, button, vehicle, animal, food, shape, number, input and label.

#### Repeat

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

#### Test

To run the code and observe what happens to identify where there might be bugs in the program.

#### Implement

When a design is turned into a program using coding.

#### Interval

In a timer, this is the length of time between the timer code running and the next time it runs e.g. every 1 second.

#### Predict

Use your understanding of a situation to say what will happen in the future or will be a consequence of something.

#### Run

Clicking the Play button to make the computer respond to the code.

#### Scene

In 2Code, this is the combination of the background and objects in a program.

#### Timer

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





### Action

The way that objects change when programmed to do so. For example, move or change a property.

### Background

In 2Code the background is an image in the design that does not change.

### Command

A single instruction in 2Code.

### Execute

This is the proper word for when you run the code.
We say, 'the program (or code) executes.'

# O

#### **Alert**

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

### Button

A type of object that responds to being clicked on.

## Debug/Debugging

Fixing code that has errors so that the code will run the way it was designed to.



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

### Code blocks

A way to write code using blocks which each have an object or an action. Each group of blocks will run when a specific condition is met or when an event occurs.

### Design

In coding, this is a plan for the program showing the visual look of the user interface (the screen) with the objects. The algorithm can be represented as part of the design, showing actions and events.



Flowchart An occurrence that causes A diagram that uses a block of code to be run. The event could be the boxes and arrows to result of user action such as the user pressing a key diagram. (when Key) or clicking or

2Code, the event commands are used to create blocks of code that are run when events

swiping the screen (when Clicked, when Swiped). In

happen.

When coding commands are put inside other commands. These commands only run when the outer command runs.



#### Implement

When a design is turned into a program using coding.



#### Repeat until

In 2Code this command will repeat a block of commands until a condition is met.

specifically shaped, labelled represent an algorithm as a

#### A conditional command.

This tests a statement. If the condition is true, then the commands inside the 'if block' will be run. If the condition is not met, then the commands inside the 'else block' are run.

## Object

Items in a program that can be given instructions to move or change in some way (action). In 2Code Gibbon, these include character, turtle, button, vehicle, animal, food, shape, number, input and label.

### Predict

Use your understanding of a situation to say what will happen in the future or will be a consequence of something.

#### 'If' Statement

A computer uses an IF statement to decide which bit of code to run. IF a condition is true, then the commands inside the block will be run.

#### Input

Information going into the computer. This could be the user moving or clicking the mouse, or the user entering characters on the keyboard. On tablets there are other forms such as finger swipes, touch gestures and tilting the device.



#### Prompt

A question or request asked in coding to obtain information from the user in order to select which code to run.



#### Repeat

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



Clicking the Play button to make the computer respond to the code.



## Properties

These determine the look and size of an object. Each object has properties such as the image, scale and position of the object.

### Time

In coding, use a timer command to run a block of commands after a timed delay or at regular intervals.

# 0

### Selection

Selection is a decision command. When selection is used, a program will choose which bit of code to run depending on a condition.



### Sequence

This is when a computer program runs commands in order.

### Variable

A named area in computer memory. A variable has a name and a value. The program can change this variable value. Variables are used in programming to keep track of things that can change while a program is running.

#### Event

An occurrence that causes a block of code to be run. The event could be the result of user action such as the user pressing a key. (when Key) or clicking or swiping the screen (when Clicked, when Swiped) or when objects interact (collision). In 2Code, the event commands are used to create blocks of code that are run when events happen.



When coding commands are put inside other commands. These commands only run when the outer command runs

#### Physical System

In this context, this is any object or situation that can be analysed and modelled. For example modelling the function of a traffic light, modelling friction of cars moving down surfaces or modelling the functions of a home's security system.

#### Function

A block or sequence of code that you can access when you need it, so you don't have to rewrite the code repeatedly. Instead. you simply 'call' the function each time you want it.



Items in a program that can be given instructions to move or change in some way (action). In 2Code Gorilla, the object types are button number, input, text, shape turtle, character, object, vehicle, animal.



These determine the look and size of an object. Each object has properties such as the image, scale and position of the object.

A conditional decision command. When selection is used, a program will choose which bit of code to run depending on a condition. In 2Code selection is accomplished using 'if' or 'if/else' statements.

#### Input

Information going into the computer. This could be the user moving or clicking the mouse, or the user entering characters on the keyboard. On tablets there are other forms such as finger swipes, touch gestures and tilting the device.

#### Output

Information that comes out of the computer e.g. sound, prompt, alert or print to screen.

This command can be used to make a block of commands run a set number of times, until a condition is met or forever.

#### Sequence

This is when a computer program runs commands in order.

#### Simplify

In coding this is used to describe modifying the code to complete the same process with less lines of code.







#### **Key Vocabulary**

Abstraction

A way of de-cluttering and removing unnecessary details to get a program functioning.

Concatenation

The action of linking a mixture of strings, variable values and numbers together in a series.

Efficient

In coding, simplified code runs faster and uses less processing memory, it is said to be more efficient. Action

The way that objects change when programmed to do so. For example, move or change a property.

Debug\ Debugging Fixing code that has errors so that the code will run the way it was designed.

Flowchart

A diagram that uses specifically shaped, labelled boxes and arrows to represent an algorithm as a diagram. Algorithm

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

Decomposition

A method of breaking down a task into manageable components. This makes coding easier as the components can then be coded separately and then brought back together in the program.

Time

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

A named area in computer memory. A variable has a name and a value. The program can change this variable value. Variables are used in programming to keep track of things that can change while a program is running. In 2Code, variables can be strings, numbers or computer-generated variables to control objects of a type.



**Key Vocabulary** 

Function

A block or sequence of code that you can access when you need it, so you don't have to rewrite the code repeatedly. Instead, you simply call the function each time you want it.

Object

Items in a program that can be given instructions to move or change in some way (action). In 2Code

Gorilla, the object types are button number, input, text, shape turtle, character, object, vehicle, animal.

An independent code module that fulfils a task and is referenced within a larger body of code. In 2Code a procedure might be coded as a function.

Input
Information going into the computer. This could be the user moving or clicking the mouse, or the user entering characters on the keyboard. On tablets there are other forms such as finger swipes, touch gestures and tilting the device. In 2Code the commands prompt for input and get input are used to prompt the user to enter typed input and then use this input.

Properties

These determine the look and size of an object. Each object has properties such as the image, scale and position of the object.

This command will open another Purple Mash file or an external website that you specify when it is called.

Output
Information that comes out
of the computer e.g. sound.
prompt, alert or print to
screen.

Use your understanding of a situation to say what will happen in the future or will be a consequence of something

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

Selection
Selection is a decision
command. When selection
is used, a program will
choose which bit of code to
run depending on a
condition. In 2Code
selection is accomplished
using 'if' or 'if/else'
statements.

In 2Code, this is a way to organise a program into separate pages (tabs) of code.

A model that represents a real or imaginary situation. Simulations can be used to explore options and to test predictions.

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

Repeat Until
In 2Code this command will
repeat a block of commands
until a condition is met.

Variable
A named area in computer memory. A variable has a name and a value. The program can change this variable value. Variables are used in programming to keep track of things that can change while a program is running.

# KS2 Year B



### Computing Vocabulary - Unit: 4.2 Online safety part 1

### AdFly

An online advertising marketplace that allows publishers to monetize their website traffic by placing advertisements on their site.

#### Collaborate

To work jointly on an activity or project.

### **Digital footprint**

The information about a person that exists on the Internet as a result of their online activity.

#### Attachment

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

#### Cookies

A small amount of data generated by a website and saved by a web browser. Its purpose is to remember information about the user.

#### Malware

Software that is specifically designed to disrupt, damage, or gain unauthorised access to a computer system.

#### Citation

Making reference to the original source of a piece of information quotation or image.

### Copyright

When the rights to something belong to a specific person.

### **Phishing**

Practice of sending email pretending to be from reputable companies in order to persuade individuals to reveal personal information, such as passwords and credit



## Computing Vocabulary - Unit: 4.2 Online safety part 2

Plagiarism

Taking someone else's work or ideas and passing them off as one's own.

Spam

Messages sent over the Internet, typically to many users, for the purposes of advertising, phishing or spreading malware. Ransomware

A type of malicious software designed to block access to a computer system until a sum of money is paid.

Virus

A piece of code which can copy itself and typically has a damaging effect on the device, such as corrupting the system or destroying data. **SMART rules** 

A set of rules based around the word SMART designed to help you stay safe when online. SMART represents the words Safe, Meet, Accept, Reliable, Tell.

Watermark

Watermarks are used mainly on images or videos to show who the content belongs to.



## Computing Vocabulary - Unit: 3.6 Branching databases

Another name for a branching database.

Database
A collection of data organised in such a way that it can be searched, and information found easily. Database usually refers to data stored on computers.

Branching database

Used to classify groups of objects. It is used to help identify the objects by answering questions with either 'yes' or 'no'. Branching databases can also be called binary trees.

Data

A collection of information, especially facts or numbers, obtained by observation, questions or measurement to be analysed and used to help decision-making.

Debugging

The process of identifying and removing errors from computer hardware or software.



## Computing Vocabulary - Unit: 4.4 Writing for different audiences

Campaign

An organised course of action to achieve

An organised course of action to achieve a goal.

Format

The way in which something is arranged or set out.

Font

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

Genre

The style or category type of a piece of art, music or writing. Opinion

A view or judgment someone forms about something, not always based on fact.

Reporter

A person who reports news or conducts interviews for the press or broadcasting media.

Viewpoint

The way someone sees or thinks about something.



### Computing Vocabulary - Unit: 6.7 Quizzing

Clone
To make a complete copy of something.

Cloze

Cloze

Audience
People who watch a performance or use a resource.

A test in which words are removed from a text and replaced with spaces. The learner has to fill each space with the correct word(s).

Audio Sound (especially when recorded).

Preview

To see what something (or part of something) looks like before committing to it being the final version.

Case-Sensitive
Differentiating between capital and lower-case letters.

Quiz

An activity in which participants answer questions and receive a score dependent upon correct answers.



### Computing Vocabulary - Unit: 3.7 Simulation

Analysis

A detailed examination of something.

Modelling

The act of representing something, often on a smaller scale. Simulation

A program that models a real-life situation. They let you try things out that would be too difficult or dangerous to do in real life.

**Evaluation** 

To judge the value, condition or effectiveness of something.

Decision

The act or result of making a choice after careful thought.



### Computing Vocabulary - Unit: 3.3 Spreadsheets

**Key Vocabulary** 

Advance mode

A mode of 2Calculate in which the cells have references and can include formulae.

A collection of information, especially facts or numbers, obtained by observation, questions or measurement to be analysed and used to help decision-making.

C Less Than

This symbol shows that a number to the left of it has less value than one to the

right.

Bar graph
A chart that uses bars to show quantities or numbers, so they can be easily compared.

Cell Address
Every cell has an address. This can be found by reading the column letter then row number.

Lettered, vertical reference points for the cells in a spreadsheet.

More Than
This symbol shows that a number to the left of it has greater value than one to the right.

Equals

This symbol shows that numbers or number sentences either side are equal in value.

Rows
Numerical, horizontal reference points for the cells in a spreadsheet.

More than, Less than & Equal Tool

This highlights either more than (>), less than (<) or equals (=) symbols according to which numbers are either side of it.

Pie Chart

A circular chart divided into segments which each represent a part of the total amount.

A computer program that represents information in a grid of rows and columns. Any cell in the grid may contain either data or a formula that describes the value to be inserted based on the values in other cells.

Quiz Tool

This can be used after the equals sign or instead of a number in a calculation. If you input the correct answer it will disappear.

An organised display of information laid out in rows and columns.

Spin Tool
Clicking on this in a cell
will increase or decrease
the value in the cell to the
right by 1.



## Computing Vocabulary - Unit: 4.3 Spreadsheets

#### **Key Vocabulary**

Data
A collection of information, especially facts or numbers, obtained by observation, questions or measurement to be analysed and used to help decision-making.

The way that data is displayed in a cell. For example using units such as £ or \$.

Percentage
per' 'cent' means
number of parts per
hundred.

The position of a digit to the right of a decimal point. In 2Calculate, the number of decimal places to be displayed can be chosen.

Use the formula wizard or type into the formula bar to create a formula in a cell, this will calculate the value for the cells based upon the value of other cells in the spreadsheet.

Tests whether the entered calculation in the cells to the left of the tool has the correct answer in the cell to the

right of the tool.

Line graph

A line graph is used to
display information which
can change over time. For
example, temperature at
different times of the day.

Random Number Tool
This tool, when clicked,
will generate a random
number.

Timer
When placed in the spreadsheet, clicking the timer adds 1 to the value of the cell to its right every second until it is clicked again.

Spin Tool

This tool changes a number to the right of it by one each time an arrow is pressed.

Place value

This is the value of each digit within a number.

For example 354, the 3 = 3 hundreds, the 5 = 5 tens and the 3 = 3 ones.



### Computing Vocabulary - Unit: 5.3 Spreadsheets

**Key Vocabulary** 

Rows
Boxes running
horizontally in a
spreadsheet.

A collection of information, especially facts or numbers, obtained by observation, questions or measurement to be analysed and used to help decision-making.

Advance mode
A mode of 2Calculate in
which the cells have
references and can
include formulae.

A computer program that represents data in cells in a grid of rows and columns. Any cell in the grid may contain either data or a formula that describes the value to be inserted based on the values in other cells.

Format
The way that text looks.
Formatting cells is helpful for interpreting a cell's contents for example you might want to format a cell to show a fraction e.g. 4 ½ or include units such as £ or \$.

Columns

Boxes running vertically in a spreadsheet.

A group of letters, numbers, or other symbols which represents a scientific or mathematical rule. The plural of formula is formulae.

An area of the spreadsheet into which formulae can be entered using the '=' sign to open the fomula.

Formula Wizard
The wizard guides you in creating a variety of formulae for a cell such as calculations, totals, averages, minimum and maximum for the selected cells.

Adds up the value of every cell above it, next to it or diagonal to it according to which total tool is selected.

'How Many?' Tool
Counts how many of a
variable there are in a
spreadsheet.

Used in computing to keep track of things that can change while a program is running.



## Computing Vocabulary - Unit: 6.3 Spreadsheets

#### **Key Vocabulary**

Rows
Horizontal, numbered reference points for the cells in a spreadsheet.

Data
A collection of information, especially facts or numbers, obtained by observation, questions or measurement to be analysed and used to help decision-making.

Move cell tool

Allows selected cells to be draggable.

A computer program that represents data in cells in a grid of rows and columns. Any cell in the grid may contain either data or a formula that describes the value to be inserted based on the values in other cells.

**Probability** 

The extent to which an

event is likely to occur,

measured by the ratio of

the favourable cases to

the whole number of

cases possible.

A group of letters,
numbers, or other symbols
which represents a
scientific or mathematical
rule. The plural of formula
is formulae.

Vertical, lettered reference

points for the cells in a

spreadsheet.

Money that is earned in trade or business after paying the costs of producing and selling goods and services.

Advance mode

A mode of 2Calculate in which the cells have references and can include formulae.

Count (How Many) Tool
Counts how many of a
variable there are in a
spreadsheet.

Sim
die to
bety

The way that text looks.
Formatting cells is
helpful for interpreting a
cell's contents for
example you might want
to format a cell to show a
fraction e.g. 4 ½ or
include units such as £ or
S.

Dice Tool
Simulates the roll of a
die to a random number
between 1 and 6 when
you click on it.

The amount of money

available to spend on a

project.

Formula Bar
An area of the
spreadsheet into which
formulae can be entered
using the '=' sign to
open the fomula.

A diagram that represents data. Charts include graphs and other diagrams such as pie charts or flowcharts.

A cost associated with a project.

Formula Wizard
Helps a user create
formulas which perform
calculations on selected
cells. For example,
adding, multiplying,
average, total.



**Key Vocabulary** 

#### Action

The way that objects change when programmed to do so. For example, move 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

In 2Code the background is an image in the design that does not change.

#### Bug

A problem in a computer program that stops it working the way it was designed.

#### Button

A type of object that responds to being clicked on.

#### Click Event

An event that is triggered when the user clicks on an object.

#### Code

Writing the code for a computer program.

### Collision Detection Even

The event of two objects colliding.

#### Command

A single instruction in a computer program.

### **Debug/Debugging**

Fixing code that has errors so that the code will run the way it was designed to.

#### Eve

An occurrence that causes a block of code to be run. The event could be the result of user action such as the user pressing a key (when Key) or clicking or swiping the screen (when Clicked, when Swiped). In 2Code, the event commends are used to create blocks of code that are run when events happen.

#### Nesting

When coding commands are put inside other commands. These commands only run when the outer command runs.

#### Properties

These determine the look and size of an object. Each object has properties such as the image, scale and position of the object.

#### Sequence

When a computer program runs commands in order.

#### Turtle Object

A type of object in 2Code that moves by coding angles of rotation and distance to move.

### Flowchart

A diagram which represents an algorithm.

#### Input

Information going into the computer. Can include moving or clicking the mouse, using the keyboard, swiping and tilting the device.

#### Oblect

Items in a program that can be given instructions to move or change in some way (action). In 2Code Gibbon, these include character, turtle, button, vehicle, animal, food, shape, number, input and label.

#### Repeat

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

#### Test

To run the code and observe what happens to identify where there might be bugs in the program.

#### Implement

When a design is turned into a program using coding.

#### Interval

In a timer, this is the length of time between the timer code running and the next time it runs e.g. every 1 second.

#### Predict

Use your understanding of a situation to say what will happen in the future or will be a consequence of something.

#### Run

Clicking the Play button to make the computer respond to the code.

#### Scene

In 2Code, this is the combination of the background and objects in a program.

#### Timer

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





### Action

The way that objects change when programmed to do so. For example, move or change a property.

### Background

In 2Code the background is an image in the design that does not change.

### Command

A single instruction in 2Code.

### Execute

This is the proper word for when you run the code.
We say, 'the program (or code) executes.'

# O

#### **Alert**

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

### Button

A type of object that responds to being clicked on.

## Debug/Debugging

Fixing code that has errors so that the code will run the way it was designed to.



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

### Code blocks

A way to write code using blocks which each have an object or an action. Each group of blocks will run when a specific condition is met or when an event occurs.

### Design

In coding, this is a plan for the program showing the visual look of the user interface (the screen) with the objects. The algorithm can be represented as part of the design, showing actions and events.



Flowchart An occurrence that causes A diagram that uses a block of code to be run. The event could be the boxes and arrows to result of user action such as the user pressing a key diagram. (when Key) or clicking or

2Code, the event commands are used to create blocks of code that are run when events

swiping the screen (when Clicked, when Swiped). In

happen.

When coding commands are put inside other commands. These commands only run when the outer command runs.



#### Implement

When a design is turned into a program using coding.



#### Repeat until

In 2Code this command will repeat a block of commands until a condition is met.

specifically shaped, labelled represent an algorithm as a

#### A conditional command.

This tests a statement. If the condition is true, then the commands inside the 'if block' will be run. If the condition is not met, then the commands inside the 'else block' are run.

## Object

Items in a program that can be given instructions to move or change in some way (action). In 2Code Gibbon, these include character, turtle, button, vehicle, animal, food, shape, number, input and label.

### Predict

Use your understanding of a situation to say what will happen in the future or will be a consequence of something.

#### 'If' Statement

A computer uses an IF statement to decide which bit of code to run. IF a condition is true, then the commands inside the block will be run.

#### Input

Information going into the computer. This could be the user moving or clicking the mouse, or the user entering characters on the keyboard. On tablets there are other forms such as finger swipes, touch gestures and tilting the device.



#### Prompt

A question or request asked in coding to obtain information from the user in order to select which code to run.



#### Repeat

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



Clicking the Play button to make the computer respond to the code.



## Properties

These determine the look and size of an object. Each object has properties such as the image, scale and position of the object.

### Time

In coding, use a timer command to run a block of commands after a timed delay or at regular intervals.

# 0

### Selection

Selection is a decision command. When selection is used, a program will choose which bit of code to run depending on a condition.



### Sequence

This is when a computer program runs commands in order.

### Variable

A named area in computer memory. A variable has a name and a value. The program can change this variable value. Variables are used in programming to keep track of things that can change while a program is running.

#### Event

An occurrence that causes a block of code to be run. The event could be the result of user action such as the user pressing a key. (when Key) or clicking or swiping the screen (when Clicked, when Swiped) or when objects interact (collision). In 2Code, the event commands are used to create blocks of code that are run when events happen.



When coding commands are put inside other commands. These commands only run when the outer command runs

#### Physical System

In this context, this is any object or situation that can be analysed and modelled. For example modelling the function of a traffic light, modelling friction of cars moving down surfaces or modelling the functions of a home's security system.

#### Function

A block or sequence of code that you can access when you need it, so you don't have to rewrite the code repeatedly. Instead. you simply 'call' the function each time you want it.



Items in a program that can be given instructions to move or change in some way (action). In 2Code Gorilla, the object types are button number, input, text, shape turtle, character, object, vehicle, animal.



These determine the look and size of an object. Each object has properties such as the image, scale and position of the object.

A conditional decision command. When selection is used, a program will choose which bit of code to run depending on a condition. In 2Code selection is accomplished using 'if' or 'if/else' statements.

#### Input

Information going into the computer. This could be the user moving or clicking the mouse, or the user entering characters on the keyboard. On tablets there are other forms such as finger swipes, touch gestures and tilting the device.

#### Output

Information that comes out of the computer e.g. sound, prompt, alert or print to screen.

This command can be used to make a block of commands run a set number of times, until a condition is met or forever.

#### Sequence

This is when a computer program runs commands in order.

#### Simplify

In coding this is used to describe modifying the code to complete the same process with less lines of code.







#### **Key Vocabulary**

Abstraction

A way of de-cluttering and removing unnecessary details to get a program functioning.

Concatenation

The action of linking a mixture of strings, variable values and numbers together in a series.

Efficient

In coding, simplified code runs faster and uses less processing memory, it is said to be more efficient. Action

The way that objects change when programmed to do so. For example, move or change a property.

Debug\ Debugging Fixing code that has errors so that the code will run the way it was designed.

Flowchart

A diagram that uses specifically shaped, labelled boxes and arrows to represent an algorithm as a diagram. Algorithm

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

Decomposition

A method of breaking down a task into manageable components. This makes coding easier as the components can then be coded separately and then brought back together in the program.

Time

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

A named area in computer memory. A variable has a name and a value. The program can change this variable value. Variables are used in programming to keep track of things that can change while a program is running. In 2Code, variables can be strings, numbers or computer-generated variables to control objects of a type.



**Key Vocabulary** 

Function

A block or sequence of code that you can access when you need it, so you don't have to rewrite the code repeatedly. Instead, you simply call the function each time you want it.

Object

Items in a program that can be given instructions to move or change in some way (action). In 2Code

Gorilla, the object types are button number, input, text, shape turtle, character, object, vehicle, animal.

An independent code module that fulfils a task and is referenced within a larger body of code. In 2Code a procedure might be coded as a function.

Input
Information going into the computer. This could be the user moving or clicking the mouse, or the user entering characters on the keyboard. On tablets there are other forms such as finger swipes, touch gestures and tilting the device. In 2Code the commands prompt for input and get input are used to prompt the user to enter typed input and then use this input.

Properties

These determine the look and size of an object. Each object has properties such as the image, scale and position of the object.

This command will open another Purple Mash file or an external website that you specify when it is called.

Output
Information that comes out
of the computer e.g. sound.
prompt, alert or print to
screen.

Use your understanding of a situation to say what will happen in the future or will be a consequence of something

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

Selection
Selection is a decision
command. When selection
is used, a program will
choose which bit of code to
run depending on a
condition. In 2Code
selection is accomplished
using 'if' or 'if/else'
statements.

In 2Code, this is a way to organise a program into separate pages (tabs) of code.

A model that represents a real or imaginary situation. Simulations can be used to explore options and to test predictions.

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

Repeat Until
In 2Code this command will
repeat a block of commands
until a condition is met.

Variable
A named area in computer memory. A variable has a name and a value. The program can change this variable value. Variables are used in programming to keep track of things that can change while a program is running.