

Year 6

[1. Computing systems and networks - Communication and collaboration](#)

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Year 6- Communication and collaboration



L1- To explain the importance of internet addresses	L2- To recognise how data is transferred across the internet	L3- To explain how sharing information online can help people to work together	L4- To evaluate different ways of working together online	L5- To recognise how we communicate using technology	L6- To evaluate different methods of online communication
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communication 	Sharing or exchanging information using technology, such as emails, messages, or video calls.
Domain Name Server (DNS) 	A system that translates website names (like www.example.com) into IP addresses so computers can find each other on the internet.
Internet Protocol (IP) 	A set of rules that control how data is sent and received over the internet.
data 	Information that is stored, transferred, or processed by computers.
address 	A unique identifier for a device or location on a network, such as an IP address
data payload 	The actual content or information being sent in a data packet across the internet.

Public
 Something in open view


Private
 Involving a particular person or group only


It is important to remember that when sharing something over the internet, you should protect your personal information, check that the content is appropriate, and make sure you have permission to share it.

Networked computers use special addresses called IP addresses, which are structured like this:

192.168.1.200

IP stands for **Internet Protocol**.

When a message is sent from one computer to another over a network, both the destination and start address are included.

From: 192.168.1.200

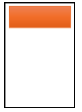
To: 192.168.1.21



Year 6- Web page creation



L1- To review an existing website and consider its structure	L2- To plan the features of a web page	L3- To consider the ownership and use of images (copyright)	L4- To recognise the need to preview pages	L5- To outline the need for a navigation path	L6- To recognise the implications of linking to content owned by other people
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website 	A collection of interlinked web pages, stored under a single domain.
browser 	A program used to view, navigate, and interact with web pages.
HTML 	HTML (HyperText Markup Language) is a standardised language used to define the structure of web pages
header 	A line or block of text that appears at the top of every page in a document or a website.
homepage 	A page on the internet that you choose to appear first on your screen whenever you make a connection to the internet.



Google Sites

Header

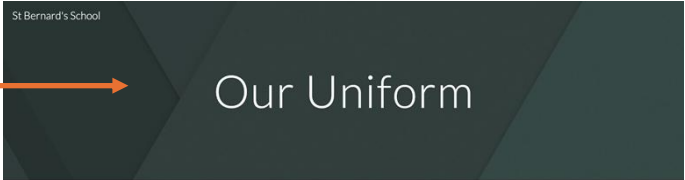


Image to link to the text



Textbox with content

Uniform at St Bernard's

Your children should wear:

- Green Tshirts bearing the St Bernard's logo
- Green or black shorts or skirts
- Black plimssoles
- Long hair should be tied back as a safety precaution.

Many thanks in advance for your cooperation.



Remember, you have to check whether your webpage looks good on all devices!



Year 6- Variables in games

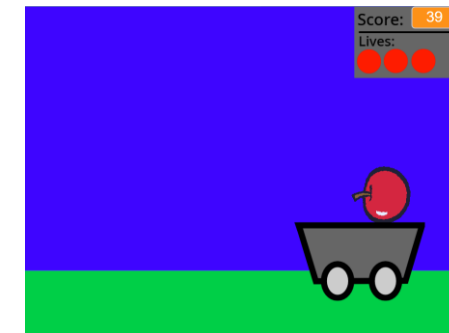


L1- To define a 'variable' as something that is changeable	L2- To explain why a variable is used in a program	L3- To choose how to improve a game by using variables	L4- To design a project that builds on a given example	L5- To use my design to create a project	L6- To evaluate my project
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variable 	A named piece of data (often a number or text) stored in a computer's memory, which can be accessed and <u>changed</u> by a computer program
value 	The amount represented by a letter or symbol
code 	The different sets of commands that are sent to the computer so the computer can run.
program 	A set of ordered commands that can be run by a computer to complete a task.
debug 	The process of finding and correcting errors in a program.

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when this sprite clicked
ask  what's your name?  and wait
set  name  to  answer
say  join  Hi  name  for 2  seconds
ask  How old are you?  and wait
set  age  to  answer
ask  join  Are you  join  age  years old?  and wait
if  answer = yes  then
say  Oh good, I've used variables well  for 5  seconds
  
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In this unit you will be creating a game on scratch that will keep a score.

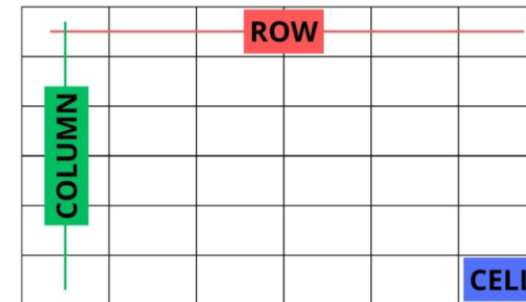


Year 6- Introduction to Spreadsheets

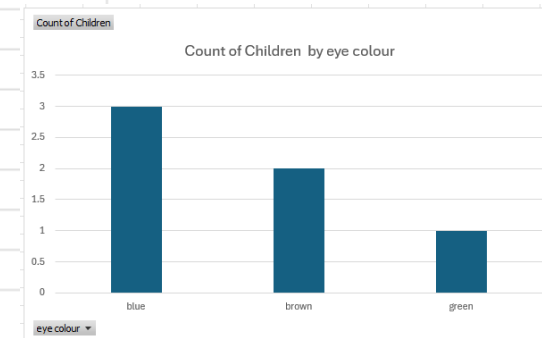


L1- To create a data set in a spreadsheet	L2- To build a data set in a spreadsheet	L3- To explain that formulas can be used to produce calculated data	L4- To apply formulas to data	L5- To create a spreadsheet to plan an event	L6- To choose suitable ways to present data
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data 	Information that can be collected, measured, and analysed to answer questions or make decisions.
collecting 	The process of gathering data from different sources to use in a spreadsheet.
table 	A way of organising data in rows and columns so it's easier to read and understand.
organise 	To arrange or sort data so it's easier to understand or use.
software 	A program or set of instructions that tells a computer what to do, such as spreadsheet programs like Excel or Google Sheets.
spreadsheet 	A digital tool used to store, organise, and calculate data using rows, columns, and formulas.



	A	B	C
1	Children	Eye Colour	
2	Ben	blue	
3	Gemma	blue	
4	Oscar	green	
5	Alice	brown	
6	Jacob	brown	
7	Thomas	Blue	
8			



In this unit we will be Microsoft Excel.

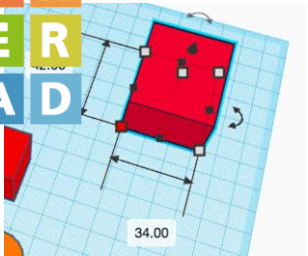
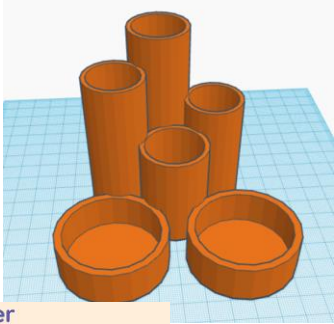


Year 6- 3D modelling



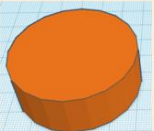
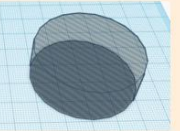
L1- To recognise that you can work in three dimensions on a computer	L2- To identify that digital 3D objects can be modified	L3- To recognise that objects can be combined in a 3D model	L4- To create a 3D model for a given purpose	L5- To plan my own 3D model	L6- To create my own digital 3D model
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perspective 	The way objects appear depending on your viewpoint, helping you see depth and position in a 3D space.
duplicate 	To make an exact copy of an object in your 3D model.
combine 	To join two or more objects together to make one new shape or structure.
modify 	To change or adjust an object's shape, size, or position in your model.
resize 	To make an object bigger or smaller in your 3D design.

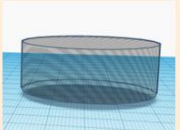
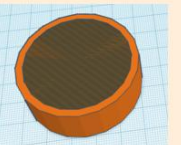
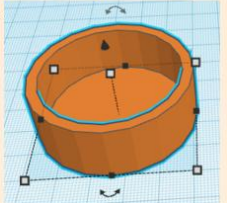




Make your own cylinder-shaped container

1. Add a solid cylinder to your workplane. Note the dimensions (width, depth, and height).
2. Add a placeholder cylinder to your workplane. Reduce the dimensions to slightly smaller than your solid cylinder.

3. Lift the placeholder off the workplane by about 2mm to create the base of your shape.
4. Move the placeholder on to the cylinder and position it evenly on all sides.
5. Select and group the two objects. You should now see a hollowed out cylinder.



Year 6- Sensing movement



L1- To create a program to run on a controllable device	L2- To explain that selection can control the flow of a program	L3- To update a variable with a user input	L4- To use an conditional statement to compare a variable to a	L5- To design a project that uses inputs and outputs on a controllable device	L6- To develop a program to use inputs and outputs on a controllable device
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Micro:bit 	A circuit board with LED lights designed to help kids learn to code and create with technology.
output 	Information that is sent to a program to be processed.
input 	The result of data processed by a computer.
process 	A program, or part of a program, that is running on a computer
condition 	A situation that must exist in order for something else to happen.

