

# Computing Knowledge and Skills Progression

## Key Stage 1



	Year 1	Year 2
Computing Systems and Networks	<p><b>Knowledge</b></p> <ul style="list-style-type: none"> <li>• Explain how technology help us</li> <li>• Explain technology as something that helps us</li> <li>• Locate examples of technology in the classroom</li> <li>• Name the main parts of a computer</li> <li>• Know how to save work to a file</li> <li>• Identify rules to keep us safe and healthy when we are using technology in and beyond the home</li> </ul> <p><b>Skills</b></p> <ul style="list-style-type: none"> <li>• Able to click and drag to make objects on a screen</li> <li>• Able to type my name</li> <li>• Able to delete letters</li> <li>• Able to open my work from a file</li> </ul>	<p><b>Knowledge</b></p> <ul style="list-style-type: none"> <li>• Describe some uses of computers</li> <li>• Identify examples of computers</li> <li>• Identify that a computer is a part of IT</li> <li>• Identify examples of IT</li> <li>• Identify that some IT can be used in more than one way</li> <li>• Find examples of information technology</li> <li>• Able to Talk about uses of information technology</li> <li>• Demonstrate how IT devices work together</li> <li>• Recognise common types of technology</li> <li>• Able to say why we use IT</li> <li>• Able to list different uses of information technology</li> <li>• Able to say how rules can help keep me safe</li> <li>• Able to talk about different rules for using IT</li> <li>• Explain the need to use IT in different ways</li> </ul>

**Knowledge**

- Describe music using adjectives
- Identify simple differences in pieces of music
- Know what I do and don't like about a piece of music
- Explain that music is created and played by humans
- Explain how my music can be played in different ways
- Identify that music is a sequence of notes
- Explain how I changed my work

**Skills**

- Able to create a rhythm pattern
- Able to play an instrument following a rhythm pattern
- Able to connect images with sounds
- Use a computer to experiment with pitch
- Refine my musical pattern on a computer
- Add a sequence of notes to my rhythm
- Create a rhythm which represents an animal I've chosen
- Create my animal's rhythm on a computer

**Knowledge**

- Explain which tools I used
- Explain which tools were helpful and why
- Know that different paint tools do different jobs
- Explain that pictures can be made in lots of different ways
- Able to say whether I prefer painting using a computer or using paper
- Explain differences between painting on a computer and on paper

**Skills**

- Able to draw lines on a screen
- Able to make marks on a screen
- Able to use the paint tools to draw a picture
- Able to use the shape and line tools to recreate the work of an artist
- Able to choose appropriate shapes
- Able to create a picture in the style of an artist
- Able to make appropriate colour choices
- Able to change the colour and brush sizes
- Use dots of colour to create a picture in the style of an artist on my own

**Knowledge**

- Explain what I did to capture a digital photo
- Recognise what devices can be used to take photographs
- Talk about how to take a photograph
- Explain the process of taking a good photograph
- Explain why a photo looks better in portrait or landscape format
- Discuss how to take a good photograph
- Identify what is wrong with a photograph
- Explain why a picture may be unclear
- Recognise that images can be changed
- Identify which photos are real and which have been changed

**Skills**

- Take photos in both landscape and portrait format
- Improve a photograph by retaking it
- Experiment with different light sources
- Explore the effect that light has on a photo
- Use a tool to achieve a desired effect
- Apply a range of photography skills to capture a photo

**Knowledge**

- Identify and find keys on a keyboard
- Able to recognise keys on a keyboard
- Explain what the keys that I have learnt about already do
- Identify the toolbar and use bold, italic, and underline
- Know if my changes have improved my writing
- Say what tool I used to change the text
- Explain the differences between typing and writing

**Skills**

- Able to open a word processor
- Able to enter text into a computer
- Able to use backspace to remove text
- Able to use letter, number, and space keys
- Able to type capital letters
- Able to change the font
- Able to use 'undo' to remove changes

**Knowledge**

- Predict the outcome of a command on a device
- Recall words that can be acted out
- Compare forwards and backwards movements
- Predict the outcome of a sequence involving forwards and backwards commands
- Compare left and right turns
- Experiment with turn and move commands to move a robot
- Predict the outcome of a sequence involving up to four commands
- Choose the order of commands in a sequence
- Explain what my program should do
- Identify several possible solutions
- Plan two programs
- Use two different programs to get to the same place
- Compare different programming tools
- Find which commands to move a sprite
- Find blocks that have numbers
- Say what happens when I change a value
- Decide how each sprite will move

**Skills**

- Match a command to an outcome
- Run a command on a device
- Follow an instruction
- Give directions
- Start a sequence from the same place
- Debug my program
- Use commands to move a sprite
- Run my program

**Knowledge**

- Choose a series of words that can be enacted as a sequence
- Give clear instructions
- Show the difference in outcomes between two sequences that consist of the same commands
- Compare my prediction to the program outcome
- Follow a sequence
- Predict the outcome of a sequence
- Explain the choices I made for my mat design
- Identify different routes around my mat
- Explain what my algorithm should achieve
- Identify that a program needs to be started
- Identify the start of a sequence
- Show how to run my program
- Change the outcome of a sequence of commands
- Match two sequences with the same outcome
- Predict the outcome of a sequence of commands
- Decide which blocks to use to meet the design
- Compare my project to my design

**Skills**

- Follow instructions given by someone else
- Use an algorithm to program a sequence on a floor robot
- Use the same instructions to create different algorithms
- Test my mat to make sure that it is usable
- Create an algorithm to meet my goal
- Use my algorithm to create a program
- Plan algorithms for different parts of a task
- Put together the different parts of my program
- Test and debug each part of the program
- Build the sequences of blocks I need

- Use a Start block in a program
- Use more than one block by joining them together
- Add blocks to each of my sprites
- Delete a sprite
- Show that a project can include more than one sprite
- Choose appropriate artwork for my project
- Create an algorithm for each sprite
- Add programming blocks based on my algorithm
- Test the programs I have created
- Use sprites that match my design

- Work out the actions of a sprite in an algorithm
- Choose backgrounds for the design
- Choose characters for the design
- Create a program based on the new design
- Build sequences of blocks to match my design
- Choose the images for my own design
- Create an algorithm
- Debug my program
- Improve my project by adding features

**Knowledge**

- Describe objects using labels
- Identify the label for a group of objects
- Describe a property of an object
- Find objects with similar properties
- Choose how to group objects
- Describe groups of objects
- Compare groups of objects
- Decide how to group objects to answer a question

**Skills**

- Match objects to groups
- Count a group of objects
- Count how many objects share a property
- Group objects in more than one way
- Record how many objects are in a group
- Record and share what I have found

**Knowledge**

- Compare totals in a tally chart
- Explain what the pictogram shows
- Answer 'more than'/'less than' and 'most/least' questions about an attribute
- Choose a suitable attribute to compare people
- Give simple examples of why information should not be shared
- Share what I have found out using a computer

**Skills**

- Record data in a tally chart
- Represent a tally count as a total
- Enter data onto a computer
- Use a computer to view data in a different format
- Use pictograms to answer simple questions about objects
- Organise data in a tally chart
- Use a tally chart to create a pictogram
- Create a pictogram to arrange objects by an attribute
- Tally objects using a common attribute
- Collect data
- Create a pictogram and draw conclusions from it
- Use a computer program to present information in different ways

## Lower Key Stage 2

	Year 3	Year 4
Computing Systems and Networks	<p><b>Knowledge</b></p> <ul style="list-style-type: none"> <li>• Explain that digital devices accept inputs</li> <li>• Explain that digital devices produce outputs</li> <li>• Describe a simple process</li> <li>• Explain how I use digital devices for different activities</li> <li>• Recognise similarities between using digital devices and non-digital tools</li> <li>• Discuss why we need a network switch</li> <li>• Explain how messages are passed through multiple connections</li> <li>• Recognise different connections</li> <li>• Explain the role of a switch, server, and wireless access point in a network</li> <li>• Recognise that a computer network is made up of a number of devices</li> <li>• Identify how devices in a network are connected together</li> <li>• Identify networked devices around me</li> <li>• Identify the benefits of computer networks</li> </ul> <p><b>Skills</b></p> <ul style="list-style-type: none"> <li>• Follow a process</li> <li>• Classify input and output devices</li> <li>• Design a digital device</li> <li>• Suggest differences between using digital devices and non-digital tools</li> <li>• Demonstrate how information can be passed between devices</li> </ul>	<p><b>Knowledge</b></p> <ul style="list-style-type: none"> <li>• Demonstrate how information is shared across the internet</li> <li>• Describe the internet as a network of networks</li> <li>• Discuss why a network needs protecting</li> <li>• Describe networked devices and how they connect</li> <li>• Explain that the internet is used to provide many services</li> <li>• Recognise that the World Wide Web contains websites and web pages</li> <li>• Describe how to access websites on the WWW</li> <li>• Describe where websites are stored when uploaded to the WWW</li> <li>• Explain the types of media that can be shared on the WWW</li> <li>• Explain that internet services can be used to create content online</li> <li>• Explain what media can be found on websites</li> <li>• Recognise that I can add content to the WWW</li> <li>• Explain that there are rules to protect content</li> <li>• Explain that websites and their content are created by people</li> <li>• Suggest who owns the content on websites</li> <li>• Explain that not everything on the World Wide Web is true</li> <li>• Explain why I need to think carefully before I share or reshare content</li> <li>• Explain why some information I find online may not be honest, accurate, or legal</li> </ul>

**Knowledge**

- Explain that the person who records the sound can say who is allowed to use it
- Discuss what sounds can be added to a podcast
- Inspect the soundwave view to know where to trim my recording
- Explain how sounds can be combined to make a podcast more engaging
- Explain the difference between saving a project and exporting an audio file
- Suggest improvements to an audio recording

**Skills**

- Identify the input and output devices used to record and play sound
- Use a computer to record audio
- Re-record my voice to improve my recording
- Plan appropriate content for a podcast
- Save my project so the different parts remain editable
- Improve my voice recordings
- Record content following my plan
- Review the quality of my recordings
- Arrange multiple sounds to create the effect I want
- Open my project to continue working on it
- Choose appropriate edits to improve my podcast
- Listen to an audio recording to identify its strengths

**Knowledge**

- Explain how an animation/flip book works
- Explain why little changes are needed for each frame
- Predict what an animation will look like
- Describe an animation that is achievable on screen
- Evaluate the quality of my animation
- Review a sequence of frames to check my work
- Evaluate another learner's animation
- Explain ways to make my animation better
- Evaluate my final film
- Explain why I added other media to my animation

**Skills**

- Create an effective flip book—style animation
- Draw a sequence of pictures
- Create an effective stop-frame animation
- Break down a story into settings, characters and events
- Create a storyboard
- Use onion skinning to help me make small changes between frames
- Improve my animation based on feedback
- Add other media to my animation

**Knowledge**

- Explain why I might crop an image
- Explain that different colour effects make you think and feel different things
- Explain why I chose certain colour effects
- Identify how a photo edit can be improved
- Explain why photos might be edited
- Use feedback to guide making changes

**Skills**

- Improve an image by rotating it
- Use photo editing software to crop an image
- Experiment with different colour effects
- Add to the composition of an image by cloning
- Remove parts of an image using cloning
- Experiment with tools to select and copy part of an image
- Use a range of tools to copy between images
- Choose suitable images for my project
- Create a project that is a combination of other images
- Describe the image I want to create
- Combine text and my image to complete the project
- Review images against a given criteria

**Knowledge**

- Explain the difference between text and images
- Identify the advantages and disadvantages of using text and images
- Recognise that text and images can communicate messages clearly
- Explain that text can be changed to communicate more clearly
- Define the term 'page orientation'
- Recognise placeholders and say why they are important
- Compare work made on desktop publishing to work created by hand
- Say why desktop publishing might be helpful

**Skills**

- Change font style, size, and colours for a given purpose
- Edit text
- Create a template for a particular purpose
- Choose the best locations for my content
- Make changes to content after I've added it
- Paste text and images to create a magazine cover
- Choose a suitable layout for a given purpose
- Identify different layouts
- Match a layout to a purpose
- Identify the uses of desktop publishing in the real world

**Knowledge**

- Explain that objects in Scratch have attributes (linked to)
- Identify the objects in a Scratch project (sprites, backdrops)
- Recognise that commands in Scratch are represented as blocks
- Choose a word which describes an on-screen action for my plan
- Identify that each sprite is controlled by the commands I choose
- Create a sequence of connected commands
- Explain that the objects in my project will respond exactly to the code
- Explain what a sequence is
- Decide the actions for each sprite in a program
- Identify and name the objects I will need for a project
- Relate a task description to a design
- Identify a way to improve a program
- Explain the relationship between an event and an action
- Consider the real world when making design choices
- Identify additional features (from a given set of blocks)
- Evaluate my project
- Make design choices and justify them

**Skills**

- Create a program following a design
- Start a program in different ways
- Combine sound commands
- Order notes into a sequence
- Build a sequence of commands
- Make design choices for my artwork

**Knowledge**

- Explain the effect of changing a value of a command
- Identify everyday tasks that include repetition as part of a sequence, eg brushing teeth, dance moves
- Identify patterns in a sequence
- Identify the effect of changing the number of times a task is repeated
- Predict the outcome of a program containing a count-controlled loop
- Choose which values to change in a loop
- Explain that a computer can repeatedly call a procedure
- Identify 'chunks' of actions in the real world
- List an everyday task as a set of instructions including repetition
- Predict the outcome of a snippet of code
- Choose when to use a count-controlled and an infinite loop
- Recognise that some programming languages enable more than one process to be run at once
- Choose which action will be repeated for each object
- Evaluate the effectiveness of the repeated sequences used in my program
- Explain what the outcome of the repeated action should be"
- Explain the effect of my changes
- Identify which parts of a loop can be changed
- Develop my own design explaining what my project will do
- Evaluate the use of repetition in a project
- Evaluate the steps I followed when building my project

**Skills**

- Create a code snippet for a given purpose
- Program a computer by typing commands

- Implement my algorithm as code
- Choose which keys to use for actions and explain my choices
- Choose a character for my project
- Choose a suitable size for a character in a maze
- Program movement
- Choose blocks to set up my program
- Use a programming extension
- Build more sequences of commands to make my design work
- Choose suitable keys to turn on additional features
- Match a piece of code to an outcome
- Modify a program using a design
- Test a program against a given design
- Implement my design

- Test my algorithm in a text-based language
- Use a template to create a design for my program
- Write an algorithm to produce a given outcome
- Use a count-controlled loop to produce a given outcome
- Use a procedure in a program
- Design a program that includes count-controlled loops
- Develop my program by debugging it
- Make use of my design to write a program
- Modify a snippet of code to create a given outcome
- Modify loops to produce a given outcome
- Re-use existing code snippets on new sprites
- Select key parts of a given project to use in my own design
- Build a program that follows my design
- Refine the algorithm in my design

**Knowledge**

- Test my branching database to see if it works
- Compare two branching database structures
- Explain that questions need to be ordered carefully to split objects into similarly sized groups
- Suggest real-world uses for branching databases
- Work with a partner to test my identification tool

**Skills**

- Create two groups of objects separated by one attribute
- Investigate questions with yes/no answers
- Make up a yes/no question about a collection of objects
- Arrange objects into a tree structure
- Create a group of objects within an existing group
- Select an attribute to separate objects into groups
- Group objects using my own yes/no questions
- Select objects to arrange in a branching database
- Create yes/no questions using given attributes
- Create a physical version of a branching database
- Create questions that will enable objects to be uniquely identified
- Independently create questions to use in a branching database
- Create a branching database that reflects my plan

**Knowledge**

- Suggest questions that can be answered using a given data set
- Explain what data can be collected using sensors
- Identify data that can be gathered over time
- Identify that data from sensors can be recorded
- Identify the intervals used to collect data
- Recognise that a data logger collects data at given points
- Talk about the data that I have captured
- Explain that there are different ways to view data
- Plan how to collect data using a data logger
- Propose a question that can be answered using logged data
- Draw conclusions from the data that I have collected
- Explain the benefits of using a data logger
- Interpret data that has been collected using a data logger

**Skills**

- Choose a data set to answer a given question
- Use data from a sensor to answer a given question
- Sort data to find information
- View data at different levels of detail
- Use a data logger to collect data

## Upper Key Stage 2

	Year 5	Year 6
Computing Systems and Networks	<p><b>Knowledge</b></p> <ul style="list-style-type: none"> <li>Describe that a computer system features inputs, processes, and outputs</li> <li>Explain that computer systems communicate with other devices</li> <li>Explain that systems are built using a number of parts</li> <li>Explain the benefits of a given computer system</li> <li>Identify tasks that are managed by computer systems</li> <li>Identify the human elements of a computer system</li> <li>Compare results from different search engines</li> <li>Explain why we need tools to find things online</li> <li>Recognise the role of web crawlers in creating an index</li> <li>Relate a search term to the search engine's index</li> <li>Explain that a search engine follows rules to rank results</li> <li>Give examples of criteria used by search engines to rank results</li> <li>Describe some of the ways that search results can be influenced</li> <li>Explain how search engines make money</li> <li>Recognise some of the limitations of search engines</li> </ul> <p><b>Skills</b></p> <ul style="list-style-type: none"> <li>Make use of a web search to find specific information</li> <li>Refine my web search</li> <li>Order a list by rank</li> </ul>	<p><b>Knowledge</b></p> <ul style="list-style-type: none"> <li>Describe how computers use addresses to access websites</li> <li>Explain that internet devices have addresses</li> <li>Recognise that data is transferred using agreed methods</li> <li>Explain that all data transferred over the internet is in packets</li> <li>Explain that data is transferred over networks in packets</li> <li>Identify and explain the main parts of a data packet</li> <li>Explain that the internet allows different media to be shared</li> <li>Recognise how to access shared files stored online</li> <li>Explain how the internet enables effective collaboration</li> <li>Identify different ways of working together online</li> <li>Recognise that working together on the internet can be public or private</li> <li>Explain the different ways in which people communicate</li> <li>Identify that there are a variety of ways to communicate over the internet</li> <li>Compare different methods of communicating on the internet</li> <li>Decide when I should and should not share information online</li> <li>Explain that communication on the internet may not be private</li> </ul> <p><b>Skills</b></p> <ul style="list-style-type: none"> <li>Send information over the internet in different ways</li> <li>Choose methods of communication to suit particular purposes</li> </ul>

**Knowledge**

- Compare features in different videos
- Explain that video is a visual media format
- Identify features of videos
- Identify and find features on a digital video recording device
- make use of a microphone
- Review how effective my video is
- Suggest filming techniques for a given purpose
- Decide which filming techniques I will use
- Explain how to improve a video by reshooting and editing
- Evaluate my video and share my opinions
- Recognise that my choices when making a video will impact on the quality of the final outcome

**Skills**

- Experiment with different camera angles
- Capture video using a range of filming techniques
- Create and save video content
- Outline the scenes of my video
- Select the correct tools to make edits to my video
- Store, retrieve, and export my recording to a computer
- Make edits to my video and improve the final outcome

**Knowledge**

- Discuss how vector drawings are different from paper-based drawings
- Recognise that vector drawings are made using shapes
- Explain that each element added to a vector drawing is an object
- Identify the shapes used to make a vector drawing
- Explain how alignment grids and resize handles can be used to improve consistency
- Compare vector drawings to freehand paint drawings
- Reflect on the skills I have used and why I have used them

**Skills**

- Experiment with the shape and line tools
- Move, resize, and rotate objects I have duplicated
- Modify objects to create a new image
- Use the zoom tool to help me add detail to my drawings
- Change the order of layers in a vector drawing
- Identify that each added object creates a new layer in the drawing
- Use layering to create an image
- Copy part of a drawing by duplicating several objects
- Recognise when I need to group and ungroup objects
- Reuse a group of objects to further develop my vector drawing
- Create a vector drawing for a specific purpose

**Knowledge**

- Explain how my 3D model could be improved
- Analyse a 3D model

**Skills**

- Add 3D shapes to a project
- Move 3D shapes relative to one another
- View 3D shapes from different perspectives
- Lift/lower 3D objects
- Recolour a 3D object
- Resize an object in three dimensions
- Duplicate 3D objects
- Group 3D objects
- Rotate objects in three dimensions
- Accurately size 3D objects
- Combine a number of 3D objects
- Show that placeholders can create holes in 3D objects
- Choose objects to use in a 3D model
- Combine objects in a design
- Construct a 3D model based on a design
- Modify my 3D model to improve it

**Knowledge**

- Discuss the different types of media used on websites
- Know that websites are written in HTML
- Say why I should use copyright-free images
- Recognise the common features of a web page
- Describe why navigation paths are useful
- Explain what a navigation path is
- Evaluate the user experience of a website
- Explain the implication of linking to content owned by others

**Skills**

- Explore a website
- Draw a web page layout that suits my purpose
- Suggest media to include on my page
- Describe what is meant by the term 'fair use'
- Find copyright-free images
- Add content to my own web page
- Evaluate what my web page looks like on different devices and suggest/make edits
- Preview what my web page looks like
- Make multiple web pages and link them using hyperlinks
- Create hyperlinks to link to other people's work

**Knowledge**

- Explain what an infinite loop does
- Explain that a condition is either true or false
- Explain that a condition being met can start an action
- Identify a condition and an action in my project
- Describe what my project will do
- Identify a real-world example of a condition starting an action
- Test and debug my project
- Identify conditions in a program
- Identify the condition and outcomes in an 'if... then... else...' statement
- Explain that program flow can branch according to a condition
- Show that a condition can direct program flow in one of two ways
- Identify the outcome of user input in an algorithm
- Identify the setup code I need in my program
- Identify ways the program could be improved

**Skills**

- Create a simple circuit and connect it to a microcontroller
- Program a microcontroller to make an LED switch on
- Connect more than one output component to a microcontroller
- Design sequences that use count-controlled loops
- Use a count-controlled loop to control outputs
- Design a conditional loop
- Program a microcontroller to respond to an input
- Use selection (an 'if...then...' statement) to direct the flow of a program

**Knowledge**

- Explain that the way a variable changes can be defined
- Identify examples of information that is variable
- Identify that variables can hold numbers or letters
- Explain that a variable has a name and a value
- Identify a program variable as a placeholder in memory for a single value
- Recognise that the value of a variable can be changed
- Decide where in a program to change a variable
- Recognise that the value of a variable can be used by a program
- Explain my design choices
- Identify ways that my game could be improved
- Share my game with others
- Determine the flow of a program using selection
- Identify examples of conditions in the real world
- Explain that checking a variable doesn't change its value
- Use a condition to change a variable
- Explain the importance of the order of conditions in else, if statements
- Decide what variables to include in a project
- Design the algorithm for my project
- Design the program flow for my project

**Skills**

- Make use of an event in a program to set a variable
- Choose the artwork for my project
- Create algorithms for my project
- Choose a name that identifies the role of a variable
- Create the artwork for my project
- Test the code that I have written

- Create a detailed drawing of my project
- Use selection to produce an intended outcome
- Write an algorithm that describes what my model will do
- Modify a condition in a program
- Recall how conditions are used in selection
- Create a program with different outcomes using selection
- Use selection in an infinite loop to check a condition
- Design the flow of a program which contains 'if... then... else...'
- Outline a given task
- Use a design format to outline my project
- Implement my algorithm to create the first section of my program
- Share my program with others
- Test my program
- Extend my program further

- Use variables to extend my game
- Apply my knowledge of programming to a new environment
- Test my program on an emulator
- Transfer my program to a controllable device
- Use a variable in an if, then, else statement to select the flow of a program
- Experiment with different physical inputs
- Modify a program to achieve a different outcome
- Use an operand (e.g. <=>) in an if, then statement
- Create a program based on my design
- Test my program against my design
- Use a range of approaches to find and fix bugs

**Knowledge**

- Explain how information can be recorded
- Explain what a field and a record is in a database
- Explain that data can be grouped using chosen values
- Outline how 'AND' and 'OR' can be used to refine data selection
- Explain the benefits of using a computer to create charts

**Skills**

- Create a database using cards
- Order, sort, and group my data cards
- Choose which field to sort data by to answer a given question
- Navigate a flat-file database to compare different views of information
- Combine grouping and sorting to answer specific questions
- Group information using a database
- Choose multiple criteria to answer a given question
- Choose which field and value are required to answer a given question
- Refine a chart by selecting a particular filter
- Select an appropriate chart to visually compare data
- Ask questions that will need more than one field to answer
- Present my findings to a group
- Refine a search in a real-world context

**Knowledge**

- Suggest how to structure my data
- Explain what an item of data is
- Explain which data types can be used in calculations
- Identify that changing inputs changes outputs
- Explain why data should be organised
- Suggest when to use a table or chart

**Skills**

- Collect data
- Enter data into a spreadsheet
- Apply an appropriate format to a cell
- Choose an appropriate format for a cell
- Construct a formula in a spreadsheet
- Apply a formula to multiple cells by duplicating it
- Calculate data using different operations
- Create a formula which includes a range of cells
- Apply a formula to calculate the data I need to answer questions
- Use a spreadsheet to answer questions
- Produce a chart
- Use a chart to show the answer to questions