Featherstone Wood Primary School

Our School's Skills - Working Collaboratively, Independence, Community Values, Reflectiveness, Stickability, Risk-Taking, Inquisitiveness, Communication

Year 5 Autumn term — Computing 5:1 Coding

Our Key Learning Objectives			
To begin to simplify code			
To create a playable game			
To understand what a simulation is			
To program simulation using 2Code			
To know what decomposition and abstraction are in computer science.			
To decompose a real life situation and think about the level of abstraction			
To understand how to use friction in code.			
To begin to understand functions and how they work in code.			
To understand the different variable types and how they are used differently.			
To understand how to create a string.			
To understand concatenation and how it works			

Tick the **green** box if you fully understand and can explain your knowledge to someone else. Tick the **orange** box if you understand a bit but would need some help to explain it to someone else. Tick the **red** box if you are still learning to understand.

Key Words

Decomposition	**Abstraction**	**Concatenation**	**Function**
Function	**Simulation**	**Variable**	**String**

Write down any questions you would like to explore further.

-
-

Beacon 3

- Understand the value of computer networks but also be aware of the main dangers.
- Recognise what personal information is and explain how this can be kept safe.
- Have a secure knowledge of common online safety rules and can apply this by demonstrating the safe and respectful use of different technologies and online services.
- Implicitly relate appropriate online behaviour to their right to personal privacy and mental well-being of themselves and others.
- *Childrem know what a WAN and LAN are and can describe how they access the internet in school.*
- Explain how credible a webpage is and the information it contains.
- Translate algorithms that include sequence, selection, and repetition into code with increasing ease.
- Combine sequence, selection and repetition with other coding structures to achieve their algorithm design.
- Search with greater complexity for digital content when using a search engine
- Use several different ways of sharing digital content.
- *Children test and debug their program as they go and use logical methods to identify the cause of bugs, demonstrating a systematic approach to try to identify a particular line of code causing a problem.*
- *design and create their own blogs to become a content creator on the internet*

Featherstone Wood Primary School

Our School's Skills - Working Collaboratively, Independence, Community Values, Reflectiveness, Stickability, Risk-Taking, Inquisitiveness, Communication

Year 5 Autumn term — Computing 5:2 Online Safety

Our Key Learning Objectives			
To gain a greater understanding of impact that digital sharing can have.			
To review sources of support when using technology and children's responsibility to each other in their online behaviour.			
To know how to maintain secure passwords.			
To understand the advantages, disadvantages, permissions and purposes of altering an image digital and the reasons for this.			
Be aware of appropriate and inappropriate text, photographs and videos and the impact of sharing these online.			
To learn about how to reference sources in their work.			
To search the internet with consideration for the reliability of the results of sources to check validity and understand the impact of incorrect information.			
To ensure reliability through using different methods of communication.			

Tick the **green** box if you fully understand and can explain your knowledge to someone else. Tick the **orange** box if you understand a bit but would need some help to explain it to someone else. Tick the **red** box if you are still learning to understand.

Key Words

Encryption	**Plagiarism**	**Citations**	**Reference**
Reputable	**Shared image**	**Bibliography**	**Identity theft**

Write down any questions you would like to explore further.

-
-

Beacon 3

- Understand the value of computer networks but also be aware of the main dangers.
- Recognise what personal information is and explain how this can be kept safe.
- Have a secure knowledge of common online safety rules and can apply this by demonstrating the safe and respectful use of different technologies and online services.
- Implicitly relate appropriate online behaviour to their right to personal privacy and mental well-being of themselves and others.
- *Childrem know what a WAN and LAN are and can describe how they access the internet in school.*
- Explain how credible a webpage is and the information it contains.
- Translate algorithms that include sequence, selection, and repetition into code with increasing ease.
- Combine sequence, selection and repetition with other coding structures to achieve their algorithm design.
- Search with greater complexity for digital content when using a search engine
- Use several different ways of sharing digital content.
- *Children test and debug their program as they go and use logical methods to identify the cause of bugs, demonstrating a systematic approach to try to identify a particular line of code causing a problem.*
- *design and create their own blogs to become a content creator on the internet*

Featherstone Wood Primary School

Our School's Skills - Working Collaboratively, Independence, Community Values, Reflectiveness, Stickability, Risk-Taking, Inquisitiveness, Communication

Year 5 Autumn term — Computing 5:4 Databases

Our Key Learning Objectives			
To learn how to search for information in a database.			
To contribute to a class database.			
To create a database around a chosen topic.			

Tick the **green** box if you fully understand and can explain your knowledge to someone else. Tick the **orange** box if you understand a bit but would need some help to explain it to someone else. Tick the **red** box if you are still learning to understand.

Key Words

Database	**Record**	**Binary Tree**	**Collaborative**
Sort, Group and Arrange	**Statistics and reports**	**Table**	**Charts**

Write down any questions you would like to explore further.

-
-

Beacon 3

- Understand the value of computer networks but also be aware of the main dangers.
- Recognise what personal information is and explain how this can be kept safe.
- Have a secure knowledge of common online safety rules and can apply this by demonstrating the safe and respectful use of different technologies and online services.
- Implicitly relate appropriate online behaviour to their right to personal privacy and mental well-being of themselves and others.
- *Childrem know what a WAN and LAN are and can describe how they access the internet in school.*
- Explain how credible a webpage is and the information it contains.
- Translate algorithms that include sequence, selection, and repetition into code with increasing ease.
- Combine sequence, selection and repetition with other coding structures to achieve their algorithm design.
- Search with greater complexity for digital content when using a search engine
- Use several different ways of sharing digital content.
- *Children test and debug their program as they go and use logical methods to identify the cause of bugs, demonstrating a systematic approach to try to identify a particular line of code causing a problem.*
- *design and create their own blogs to become a content creator on the internet*

Featherstone Wood Primary School

Our School's Skills - Working Collaboratively, Independence, Community Values, Reflectiveness, Stickability, Risk-Taking, Inquisitiveness, Communication

Year 5 Spring term – Computing 5:5 Game Creator

Our Key Learning Objectives			
To plan a game.			
To design and create the game environment.			
To design and create the game quest.			
To finish and share the game.			
To self and peer evaluate.			

Tick the **green** box if you fully understand and can explain your knowledge to someone else. Tick the **orange** box if you understand a bit but would need some help to explain it to someone else. Tick the **red** box if you are still learning to understand.

Key Words

Animation	**Texture**	**Perspective**	**Customize**
Interactive	**Playability**	**Screenshot**	**Evaluation**

Write down any questions you would like to explore further.

-
-

Beacon 3

- Understand the value of computer networks but also be aware of the main dangers.
- Recognise what personal information is and explain how this can be kept safe.
- Have a secure knowledge of common online safety rules and can apply this by demonstrating the safe and respectful use of different technologies and online services.
- Implicitly relate appropriate online behaviour to their right to personal privacy and mental well-being of themselves and others.
- *Childrem know what a WAN and LAN are and can describe how they access the internet in school.*
- Explain how credible a webpage is and the information it contains.
- Translate algorithms that include sequence, selection, and repetition into code with increasing ease.
- Combine sequence, selection and repetition with other coding structures to achieve their algorithm design.
- Search with greater complexity for digital content when using a search engine
- Use several different ways of sharing digital content.
- *Children test and debug their program as they go and use logical methods to identify the cause of bugs, demonstrating a systematic approach to try to identify a particular line of code causing a problem.*
- *design and create their own blogs to become a content creator on the internet*

Featherstone Wood Primary School

Our School's Skills - Working Collaboratively, Independence, Community Values, Reflectiveness, Stickability, Risk-Taking, Inquisitiveness, Communication

Year 5 Spring term — Computing 5:6 Modelling

Our Key Learning Objectives			
To be introduced to 2Design and Make and the skills of Computer Aided Design.			
To explore the effect of moving points when designing.			
To design a 3D model to fit certain criteria.			
To refine and print a model.			

Tick the **green** box if you fully understand and can explain your knowledge to someone else. Tick the **orange** box if you understand a bit but would need some help to explain it to someone else. Tick the **red** box if you are still learning to understand.

Key Words

CAD	**Viewpoint**	**3D printing**	**Modelling**
Net	**2D**	**3D**	**Template**

Write down any questions you would like to explore further.

-
-

Beacon 3

- Understand the value of computer networks but also be aware of the main dangers.
- Recognise what personal information is and explain how this can be kept safe.
- Have a secure knowledge of common online safety rules and can apply this by demonstrating the safe and respectful use of different technologies and online services.
- Implicitly relate appropriate online behaviour to their right to personal privacy and mental well-being of themselves and others.
- *Childrem know what a WAN and LAN are and can describe how they access the internet in school.*
- Explain how credible a webpage is and the information it contains.
- Translate algorithms that include sequence, selection, and repetition into code with increasing ease.
- Combine sequence, selection and repetition with other coding structures to achieve their algorithm design.
- Search with greater complexity for digital content when using a search engine
- Use several different ways of sharing digital content.
- *Children test and debug their program as they go and use logical methods to identify the cause of bugs, demonstrating a systematic approach to try to identify a particular line of code causing a problem.*
- *design and create their own blogs to become a content creator on the internet*

Featherstone Wood Primary School

Our School's Skills - Working Collaboratively, Independence, Community Values, Reflectiveness, Stickability, Risk-Taking, Inquisitiveness, Communication

Year 5 Summer term — Computing 5:3 Spreadsheets

Our Key Learning Objectives			
To use formulae with a spreadsheet to convert measurements of length and distance.			
To use the count tool to answer hypotheses about common letters in use.			
To use a spreadsheet to model a real life problem.			
To use formulae to calculate area and perimeter of shapes.			
To create formulae that use text variables.			
To use a spreadsheet to help them plan a school cake sale.			

Tick the **green** box if you fully understand and can explain your knowledge to someone else. Tick the **orange** box if you understand a bit but would need some help to explain it to someone else. Tick the **red** box if you are still learning to understand.

Key Words

Average	**Spreadsheet**	**Cells**	**Timer**
Formula	**Timer**	**Formula Wizard**	**Charts**

Write down any questions you would like to explore further.

-
-

Beacon 3

- Understand the value of computer networks but also be aware of the main dangers.
- Recognise what personal information is and explain how this can be kept safe.
- Have a secure knowledge of common online safety rules and can apply this by demonstrating the safe and respectful use of different technologies and online services.
- Implicitly relate appropriate online behaviour to their right to personal privacy and mental well-being of themselves and others.
- *Childrem know what a WAN and LAN are and can describe how they access the internet in school.*
- Explain how credible a webpage is and the information it contains.
- Translate algorithms that include sequence, selection, and repetition into code with increasing ease.
- Combine sequence, selection and repetition with other coding structures to achieve their algorithm design.
- Search with greater complexity for digital content when using a search engine
- Use several different ways of sharing digital content.
- *Children test and debug their program as they go and use logical methods to identify the cause of bugs, demonstrating a systematic approach to try to identify a particular line of code causing a problem.*
- *design and create their own blogs to become a content creator on the internet*

Featherstone Wood Primary School

Our School's Skills - Working Collaboratively, Independence, Community Values, Reflectiveness, Stickability, Risk-Taking, Inquisitiveness, Communication

Year 5 Summer term — Computing 5:7 Concept Maps

Our Key Learning Objectives			
To understand the need for visual representation when generating and discussing complex ideas.			
To understand the uses of a Concept map.			
To understand and use the correct vocabulary when creating a Concept map.			
To create a Concept map.			
To understand how a Concept map can be used to retell stories and information.			
To create a collaborative Concept map and present this to an audience.			

Tick the **green** box if you fully understand and can explain your knowledge to someone else. Tick the **orange** box if you understand a bit but would need some help to explain it to someone else. Tick the **red** box if you are still learning to understand.

Key Words

Audience	**Concept map**	**Collaboratively**	**Connection**
Thought	**Concept**	**Connection**	**Visual**

Write down any questions you would like to explore further.

-
-

Beacon 3

- Understand the value of computer networks but also be aware of the main dangers.
- Recognise what personal information is and explain how this can be kept safe.
- Have a secure knowledge of common online safety rules and can apply this by demonstrating the safe and respectful use of different technologies and online services.
- Implicitly relate appropriate online behaviour to their right to personal privacy and mental well-being of themselves and others.
- *Childrem know what a WAN and LAN are and can describe how they access the internet in school.*
- Explain how credible a webpage is and the information it contains.
- Translate algorithms that include sequence, selection, and repetition into code with increasing ease.
- Combine sequence, selection and repetition with other coding structures to achieve their algorithm design.
- Search with greater complexity for digital content when using a search engine
- Use several different ways of sharing digital content.
- *Children test and debug their program as they go and use logical methods to identify the cause of bugs, demonstrating a systematic approach to try to identify a particular line of code causing a problem.*
- *design and create their own blogs to become a content creator on the internet*