



National Curriculum Aims:

- All pupils can understand and apply the fundamental principles and concepts of computer science, including abstraction, logic, algorithms and data representation
- All pupils are responsible, competent, confident and creative users of information and communication technology.

National Curriculum Aims Key Stage 1:

- Recognise common uses of information technology beyond school**

| | Year One | Year Two |
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| Recognise common uses of technology beyond school | <ul style="list-style-type: none"> Identify technology Understand rules for using technology responsibly | <ul style="list-style-type: none"> Recognise and use features of information technology Identify information technology at school, at home and in other places (e.g. shops) Explain how information technology benefits us |
| Example activities and resources | NCCE Computing Systems and Networks Y1 https://teachcomputing.org/resources Herefordshire Primary Computing Progression activity ideas https://herefordshirecis.files.wordpress.com/2020/03/1_herefordshire-primary-computing-progression-ks1-2020.pdf | NCCE Computing Systems and Networks Y2 https://teachcomputing.org/resources Herefordshire Primary Computing Progression activity ideas https://herefordshirecis.files.wordpress.com/2020/03/1_herefordshire-primary-computing-progression-ks1-2020.pdf |

National Curriculum Aims Key Stage 2

- Understand computer networks including the internet; how they can provide multiple services, such as the World Wide Web
- Appreciate how [search] results are selected and ranked
- Use search technologies effectively
- Understand opportunities networks offer for communication and collaboration

| | Year Three | Year Four | Year Five | Year Six |
|---|--|---|--|---|
| <p>Understand computer networks including the internet; how they can provide multiple services, such as the World Wide Web</p> | <ul style="list-style-type: none"> • Explain how digital devices function • Identify input and output devices • Recognise the physical components of a network • Explain how computer networks can be used to share information | <ul style="list-style-type: none"> • Describe how networks connect to other networks • Know that the internet provides services and be able to name some e.g. World Wide Web • Outline how information can be shared via the World Wide Web • Evaluate the reliability of content and the consequences of unreliable content | <ul style="list-style-type: none"> • Understand that computers can be connected together to form a system • Recognise how data and information is transferred across the internet • Explain ways in which computer systems allow us to work together | <ul style="list-style-type: none"> • Identify methods of communication using the internet • Recognise and evaluate different methods of online communication (e-safety link) |
| <p>Appreciate how search results are selected and ranked Use search technologies effectively</p> | <ul style="list-style-type: none"> • With support, search within a given website to find information e.g. <i>National Geographic Kids, BBC Bitesize</i> | <ul style="list-style-type: none"> • Search within a given website to find information e.g. <i>National Geographic Kids, BBC Bitesize</i> • Recognise search results that are relevant and others that are less relevant | <ul style="list-style-type: none"> • Use a search engine to find specific information • Give some examples of how to perform an effective search e.g. key words, spelling | <ul style="list-style-type: none"> • Identify how to use a search engine and recognise there are a number of search engines • Explain how search results are selected • Explain how search results are ranked • Explain why the order of results is important • Evaluate the results of search terms and explain the limitations of search engines |
| <p>Example activities and resources</p> | <p>NCCE Computing Systems and Networks Y3 https://teachcomputing.org/resources</p> <p>Barefoot Network Hunt https://www.barefootcomputing.org/resources/network-hunt-activity</p> <p>Herefordshire Primary Computing Progression activity ideas https://herefordshirecis.files.wordpress.com/2020/04/2_herefordshire-primary-computing-progression-2020-lks2.pdf</p> | <p>NCCE Computing Systems and Networks Y4 https://teachcomputing.org/resources</p> <p>BBC Bitesize How does the internet work? https://www.bbc.co.uk/bitesize/topics/zs7s4wx/articles/z3tbqk7</p> <p>What is the World Wide Web? https://www.bbc.co.uk/bitesize/topics/zs7s4wx/articles/z2nbgk7</p> <p>Barefoot Modelling the Internet https://www.barefootcomputing.org/resources/modelling-the-internet</p> <p>Herefordshire Primary Computing Progression activity ideas https://herefordshirecis.files.wordpress.com/2020/04/2_herefordshire-primary-computing-progression-2020-lks2.pdf</p> | <p>NCCE Computing Systems and Networks Y5 https://teachcomputing.org/resources</p> <p>Barefoot Modelling the Internet https://www.barefootcomputing.org/resources/modelling-the-internet</p> <p>Herefordshire Primary Computing Progression activity ideas https://herefordshirecis.files.wordpress.com/2020/04/3_herefordshire-primary-computing-progression-2020-lks2.pdf</p> | <p>NCCE Computing Systems and Networks Y6 https://teachcomputing.org/resources</p> <p>BBC Bitesize How do search engines work? https://www.bbc.co.uk/bitesize/topics/zs7s4wx/articles/ztbq6f</p> <p>Barefoot Ranking Search https://www.barefootcomputing.org/resources/ranking-search-activity</p> <p>Barefoot Selecting Search https://www.barefootcomputing.org/resources/selecting-search-activity</p> <p>Herefordshire Primary Computing Progression activity ideas https://herefordshirecis.files.wordpress.com/2020/04/3_herefordshire-primary-computing-progression-2020-lks2.pdf</p> |