

An outline mapping of the Game Maker Resources to the new ICT National Curriculum Level Descriptors

The tutorial lessons presented in these Game Maker Resources cover many of the level descriptors in the new ICT National Curriculum.

The National Curriculum areas addressed by the resources are shown in ***bold blue italic*** text on the next two sheets.

Although the Game Maker lessons do not have precise statements stating which aspect of the ICT National Curriculum is being covered, it should be quite easy to recognize the levels covered from the work being done.

As always, the amount of detail required and sophistication of the ICT techniques used combined with increasing pupil independence are indicators of the higher levels.

With some additional worksheets for evaluation and feedback, even more of the ICT National Curriculum levels could be covered.

An Outline Mapping of MicroMart's Game Maker Resources to the new ICT National Curriculum Level Descriptors

Level 3

1. Use ICT to save information and to find and use appropriate stored information, following straightforward lines of enquiry.
2. *Use ICT to generate, develop, organise and present their work.*
3. share and exchange their ideas with others
4. *Use sequences of instructions to control devices and achieve specific outcomes.*
5. Make appropriate choices when using ICT based models or simulations to help them find things out and solve problems.
6. Describe their use of ICT and its use outside school.

Level 4

1. *Combine and refine different forms of information from various sources.*
2. Understand the need for care in framing questions when collecting, finding and interrogating information.
3. Interpret their findings, question plausibility and recognise that poor-quality information leads to unreliable results.
4. Use ICT to present information in different forms and show they are aware of the intended audience and the need for quality in their presentations.
5. Exchange information and ideas with others in a variety of ways, including using digital communication.
6. Understand the risks associated with communicating digitally, including the security of personal information.
7. Use ICT-based models and simulations to explore patterns and relationships, and make predictions about the consequences of their decisions.
8. Use ICT to organise, store and retrieve information.
9. Compare their use of ICT with other methods and with its use outside school.

Level 5

1. *Combine ICT tools within the overall structure of an ICT solution.*
2. *Select the information they need for different purposes, check its accuracy and organise it in a form suitable for processing.*
3. *Use ICT to structure, refine and present information in different forms and styles for specific purposes and audiences.*
4. Exchange information and ideas with others in a variety of ways, including using digital communications.
5. *Create sequences of instructions and understand the need to be precise when framing and sequencing instructions.*
6. *Explore the effects of changing the variables in an ICT-based model.*
7. Use ICT to organise, store and retrieve information using logical and appropriate structures.
8. Use ICT safely and responsibly.
9. Discuss their knowledge and experience of using ICT and their observations of its use outside school.
10. Assess the use of ICT in their work and are able to reflect critically in order to make improvements in subsequent work.
11. Use appropriate evaluation criteria to critically evaluate the fitness for purpose of their work as it progresses.

Level 6

1. *Plan and design ICT-based solutions to meet a specific purpose and audience, demonstrating increased integration and efficiency in their use of ICT tools.*
2. *Develop and refine their work to enhance its quality, using a greater range and complexity of information.*
3. Where necessary, use complex lines of enquiry to test hypotheses.
4. Present their ideas in a variety of ways and show a clear sense of audience.
5. *Develop, try out and refine sequences of instructions and show efficiency in framing these instructions, using sub-routines where appropriate.*
6. Use ICT-based models to make predictions and vary the rules within the models.
7. Assess the validity of these models by comparing their behaviour with information from other sources.
8. Plan and review their work, creating a logically structured portfolio of digital evidence of their learning.
9. Discuss the impact of ICT on society

Level 7

1. *Design and implement systems*
2. Are able to scope the information flow required to develop an information system.
3. *Combine information from a variety of ICT based and other sources for presentation to different audiences.*
4. Identify the advantages and limitations of different information-handling applications.
5. Select and use information to develop systems suited to work in a variety of contexts, translating enquiries expressed in ordinary language into the form required by the system.
6. *Develop, test and refine sequences of instructions as part of an ICT system to solve problems.*
7. *Design ICT-based models and procedures with variables to meet particular needs.*
8. Consider the benefits and limitations of ICT tools and information sources and of the results they produce, and they use these results to inform future judgements about the quality of their work.
9. Make use of audience and user feedback to refine and enhance their ICT solutions.
10. Take part in informed discussions about the use of ICT and its impact on society.

Level 8

1. *Independently select appropriate information sources and ICT tools for specific tasks, taking into account ease of use and suitability.*
2. Design successful ways to collect and prepare information for processing.
3. *Design and implement systems for others to use.*
4. Take part in informed discussions about the social, economic, ethical and moral issues raised by ICT.

Exceptional Performance

1. Evaluate software packages and ICT-based models, analysing the situations for which they were developed and assessing their efficiency, ease of use and appropriateness.
2. *Suggest refinements to existing systems and design, implement and document systems for others to use, predicting some of the consequences that could arise from the use of such systems.*
3. When discussing their own and others' use of ICT, use their knowledge and experience of information systems to inform their views on the social, economic, ethical and moral issues raised by ICT.