

Key Stages 2–3

Design and technology

in the National Curriculum for Wales



Yr Adran Plant, Addysg, Dysgu Gydol Oes a Sgiliau
Department for Children, Education, Lifelong Learning and Skills

Llywodraeth Cynulliad Cymru
Welsh Assembly Government

Design and technology in the National Curriculum for Wales

Audience	Teachers, headteachers and governing bodies of maintained schools in Wales; local education authorities; initial teacher training providers; teacher unions and school representative bodies; church diocesan authorities; national bodies in Wales with an interest in education.
Overview	This document sets out the Welsh Assembly Government's requirements for design and technology in the national curriculum for Wales. It is issued pursuant to the powers contained in Section 108 of the Education Act 2002 and which are vested in the Welsh Ministers. The Welsh Ministers form part of the Welsh Assembly Government.
Action required	Teachers, headteachers and governing bodies of maintained schools must ensure that the legal requirements set out in this document are implemented in line with the dates specified in the Foreword.
Further information	Enquiries about this document should be directed to: Curriculum and Assessment 3–14 Division Department for Children, Education, Lifelong Learning and Skills Welsh Assembly Government Floor 10, Southgate House Wood Street Cardiff CF10 1EW Tel: 0800 083 6003 Fax: 029 2037 5496 e-mail: C&A3-14.C&A3-14@wales.gsi.gov.uk
Additional copies	Can be obtained from: Tel: 029 2037 5427 Fax: 029 2037 5494 Or by visiting the Welsh Assembly Government's website www.wales.gov.uk

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Foreword

This document sets out the revised national curriculum for **design and technology** in Wales.

The structure of the national curriculum

The national curriculum applies to pupils of compulsory school age in maintained schools. It is organised on the basis of three key stages, which are broadly as follows*:

	Pupils' ages	Year groups
Key Stage 2	7–11	3–6
Key Stage 3	11–14	7–9
Key Stage 4	14–16	10–11

In Wales, the following subjects are included in the national curriculum at the key stages shown:

Key Stage 2	English, Welsh, mathematics, science, design and technology, information and communication technology, history, geography, art and design, music and physical education.
Key Stage 3	As at Key Stage 2, plus a modern foreign language.
Key Stage 4	English, Welsh, mathematics, science and physical education.

For each subject, in each of the key stages listed above, programmes of study set out what pupils should be taught and, for Key Stages 2 and 3, attainment targets set out the expected standards of pupils' performance.

At the end of Key Stages 2 and 3, standards of pupils' performance are set out in eight level descriptions of increasing difficulty, with an additional description above Level 8 to help teachers in differentiating Exceptional Performance.

At Key Stage 4, external qualifications are the main means of assessing attainment in the national curriculum. The Welsh Assembly Government publishes annually the list of qualifications that, under Section 96 of the Learning and Skills Act 2000, are approved for use with pupils of compulsory school age.

* The key stages are defined precisely in Section 103 of the Education Act 2002.

Including all learners

The revised national curriculum contains a section on including all learners which clarifies learner entitlement and schools' responsibilities.

Implementation dates

The revised programmes of study and attainment targets for **design and technology** become legal requirements by means of an Order made by the Welsh Assembly Government and come into effect on:

- 1 August 2008 for Years 3, 4 and 5 and Years 7 and 8
- 1 August 2009 for Year 6 and Year 9.

From these dates the existing national curriculum for **design and technology** is superseded.

Welsh Assembly Government
January 2008

Including all learners

Responsibilities of schools

Under the United Nations Convention on the Rights of the Child and the Welsh Assembly Government's overarching strategy document *Rights to Action*, all children and young people must be provided with an education that develops their personality and talents to the full. The Education Act 2002 further strengthens schools' duty to safeguard and promote the welfare of all children and young people.

The equal opportunities legislation which covers age, disability, gender, race, religion and belief and sexual orientation further places a duty on schools in Wales towards present and prospective learners to eliminate discrimination and harassment, to promote positive attitudes and equal opportunities and encourage participation in all areas of school life.

Schools should develop in every learner a sense of personal and cultural identity that is receptive and respectful towards others. Schools should plan across the curriculum to develop the knowledge and understanding, skills, values and attitudes that will enable learners to participate in our multi-ethnic society in Wales. Schools should develop approaches that support the ethnic and cultural identities of all learners and reflect a range of perspectives, to engage learners and prepare them for life as global citizens.

Schools must work to reduce environmental and social barriers to inclusion and offer opportunities for all learners to achieve their full potential in preparation for further learning and life. Where appropriate, schools will need to plan and work with specialist services to ensure relevant and accessible learning experiences.

For learners with disabilities in particular, they should:

- improve access to the curriculum
- make physical improvements to increase participation in education
- provide information in appropriate formats.

Schools should seek advice regarding reasonable adjustments, alternative/adapted activities and appropriate equipment and resources, which may be used to support the full participation of all learners including those who use a means of communication other than speech.

For learners whose first language is neither English nor Welsh, schools should take specific action to help them learn both English and Welsh through the curriculum. Schools should provide learners with material that is appropriate to their ability, previous education and experience, and which extends their language development. Schools should also encourage the use of learners' home languages for learning.

Learner entitlement

Schools in Wales should ensure that all learners are engaged as full members of their school communities, accessing the wider curriculum and all school activities and working wherever possible alongside their peers. Schools should teach all programmes of study and frameworks in ways appropriate to learners' developing maturities and abilities and ensure that learners are able to use fully their preferred means of communication to access the curriculum. In order to extend their learning, learners should experience a variety of learning and teaching styles.

To enable all learners to access relevant skills, knowledge and understanding at an appropriate level, schools may use content from earlier phases or key stages within the curriculum. Schools should use material in ways suitable for the learners' age, experience, understanding and prior achievement to engage them in the learning process.

For learners working significantly below the expected levels at any key stage, schools should use the needs of the learner as a starting point and adapt the programmes of study accordingly. Sufficient flexibility exists within the curriculum to meet the needs of learners without the need for disapplication. In exceptional cases, individual learners may be disappplied, usually on a temporary basis, but group or large-scale disapplications should not be used.

Where it is not possible to cover the content of all of the programmes of study for each key stage, the statutory requirement to provide a broad, balanced curriculum can be met by selecting appropriate topics/themes from the curriculum as contexts for learning.

For more-able and talented learners working at higher levels, schools should provide greater challenge by using material in ways that extend breadth and depth of study and opportunities for independent learning. The level of demand may also be increased through the development and application of thinking, and communication, ICT and number skills across the curriculum.

Schools should choose material that will:

- provide a meaningful, relevant and motivating curriculum for their learners
- meet the specific needs of their learners and further their all-round development.

Learners of all abilities should have access to appropriate assessment and accreditation.

Skills across the curriculum

A non-statutory *Skills framework for 3 to 19-year-olds in Wales* has been developed in order to provide guidance about continuity and progression in developing thinking, communication, ICT and number for learners from 3–19.

At Key Stages 2 and 3, learners should be given opportunities to build on skills they have started to acquire and develop during the Foundation Phase. Learners should continue to acquire, develop, practise, apply and refine these skills through group and individual tasks in a variety of contexts across the curriculum. Progress can be seen in terms of the refinement of these skills and by their application to tasks that move from: concrete to abstract; simple to complex; personal to the ‘big picture’; familiar to unfamiliar; and supported to independent and interdependent.

For 14–19 learners, the framework should provide the basis for making effective progress in these skills, which can be assessed through a range of qualifications, including Key Skills.

Developing thinking



Learners develop their thinking across the curriculum through the processes of **planning, developing** and **reflecting**.

In **design and technology**, learners design and make products through the iterative process of creating and developing ideas, designing products, planning, making and reflecting on their decisions and outcomes in terms of their finished product.

Developing communication



Learners develop their communication skills across the curriculum through the skills of **oracy, reading, writing** and **wider communication**.

In **design and technology**, learners ask questions and seek out information to develop and support their design ideas. They communicate and record their ideas and intentions by explaining, writing, sketching, using detailed technical drawings and three-dimensional models.

Developing ICT



Learners develop their ICT skills across the curriculum by **finding, developing, creating and presenting information and ideas** and by using a wide range of equipment and software.

In **design and technology**, learners research and develop their ideas by using ICT to find information from databases and the internet. They communicate and present their ideas using word processors, presentation software, computer-aided design (CAD) and computer-aided manufacture (CAM).

Developing number



Learners develop their number skills across the curriculum by **using mathematical information, calculating, and interpreting and presenting findings**.

In **design and technology**, learners use mathematical information and data, presented numerically and graphically, to research and develop their ideas. They use number to measure and calculate sizes, fits and materials.

Learning across the curriculum

At Key Stages 2 and 3, learners should be given opportunities to build on the experiences gained during the Foundation Phase, and to promote their knowledge and understanding of Wales, their personal and social development and well-being, and their awareness of the world of work.

At Key Stage 4, learners' knowledge and understanding should be developed and applied within the contexts of their individual 14–19 pathways including the Learning Core.

Curriculum Cymreig (7–14) and Wales, Europe and the World (14–19)



Learners aged 7–14 should be given opportunities to develop and apply knowledge and understanding of the cultural, economic, environmental, historical and linguistic characteristics of Wales. Learners aged 14–19 should have opportunities for active engagement in understanding the political, social, economic and cultural aspects of Wales as part of the world as a whole. For 14–19 learners, this is a part of their Learning Core entitlement and is a requirement at Key Stage 4.

In **design and technology**, learners should be given opportunities to use the rich characteristics and resources of Wales as a source of inspiration and a context to design and make products.

Personal and social education



Learners should be given opportunities to promote their health and emotional well-being and moral and spiritual development; to become active citizens and promote sustainable development and global citizenship; and to prepare for lifelong learning. For 14–19 learners, this is a part of their Learning Core entitlement and is a requirement at Key Stage 4.

In **design and technology**, learners should work in contexts that allow them to make decisions based on the values that underpin society, helping them become active and informed citizens. They should be made aware of human achievements and the big ideas that have shaped the world. They should be encouraged to be enterprising and innovative in their designing and making, while having regard for sustainability and environmental issues in the twenty-first century.

Careers and the world of work



Learners aged 11–19 should be given opportunities to develop their awareness of careers and the world of work and how their studies contribute to their readiness for a working life. For 14–19 learners, this is a part of their Learning Core entitlement and is a requirement at Key Stage 4.

Design and technology contributes to learners' awareness of careers and the world of work by providing opportunities for them to understand how consumer products and services are developed and brought to the marketplace and by raising their awareness of the range and diversity of careers associated with manufacturing in the wider world. Design and technology also allows learners to engage with the design and manufacturing technologies that are increasingly used in the workplace.

Progression in design and technology

Design and technology in the Foundation Phase

In the Foundation Phase, a child's designing and making skills should be developed through using information to generate ideas; this should lead to stimulating and creative making opportunities across all Areas of Learning. Children's progression in design and technology capability should be observed with an understanding of child development and the stages children move through.

Design and technology at Key Stage 2

At Key Stage 2, learners should be given opportunities to build on their experiences during the Foundation Phase. They should be taught to design and make simple products by combining their designing and making skills with knowledge and understanding in contexts that support their work in other subjects and help develop their understanding of the made world. Learners should be made aware of human achievements and the big ideas that have shaped the world. They should be encouraged to be creative and innovative in their designing and making while being made aware of issues relating to sustainability and environmental issues in the twenty-first century.

Design and technology at Key Stage 3

At Key Stage 3, learners should be given opportunities to build on the skills, knowledge and understanding acquired at Key Stage 2. They should be taught to design and make products by combining their designing and making skills with knowledge and understanding in contexts that allow them to make decisions based on the values that underpin society, helping them become active and informed citizens. They should be made aware of human achievements and the big ideas that have shaped the world. They should be encouraged to be enterprising and innovative in their designing and making, while having regard for sustainability and environmental issues in the twenty-first century.



Skills

Designing

Pupils should be given opportunities to:

1. use a range of information sources to generate ideas for products
2. investigate how existing products look and function as a source of ideas for their own products, *e.g. examine a range of products related to their task, toys, healthy eating*
3. develop a simple specification/recipe for their products indicating their intentions and approach 
4. demonstrate their creative thinking when considering and recording solutions to problems that arise during their designing and making, *e.g. realise that it would be quicker and easier to use ready-made materials, components and ingredients rather than make their own*
5. develop and communicate their design ideas in a variety of ways, using ICT and models where appropriate 


6. consider the safety, reliability and sustainability of their activities/products, *e.g. consider how use or misuse of their products might cause injury, damage or poor health* 
7. evaluate their design ideas as they develop, considering the needs of the user.

Making

Pupils should be given opportunities to:

1. work to their specification/recipe to make products
2. choose appropriate materials, ingredients, equipment, tools/utensils and techniques, from a range made available to them
3. measure, mark out, cut, shape, join, weigh and mix a range of materials and ingredients, using appropriate tools/utensils, equipment and techniques 
4. find alternative ways of making if the first attempt fails
5. apply appropriate finishes to their products

Range

Pupils should be given opportunities to develop their design and technology capability through:

- tasks in which they explore and investigate simple products in order to acquire technological knowledge and understanding that can be applied in their designing and making
- tasks in which they learn about the responsible use of materials, considering issues of sustainability 
- tasks in which they develop and practise particular skills and techniques that can be applied in their designing and making

- tasks in which they design and make products, focusing on different contexts and materials.

They should be given opportunities to:

- be creative
- be innovative
- work independently and in groups.

Taken together, these tasks should cover a range of materials and components, including food, rigid and flexible materials and systems and control.

6. discuss their products, and evaluate their work, *e.g. explain why and how they made their product and what they think about its function, features, performance, taste*



Food

7. plan and carry out a broad range of practical food preparation tasks safely and hygienically
8. apply current healthy eating messages and consider nutritional needs when undertaking food preparation tasks
9. classify food by commodity/group and understand the characteristics of a broad range of ingredients, including their nutritional, functional and sensory properties, *e.g. meat, fish, fruit, vegetables*



Rigid and flexible materials

10. use a range of materials and components, making choices based on their developing knowledge of how they should be used, *e.g. using square-section timber or lollypop sticks to strengthen a cardboard structure*
11. learn about the efficient use of materials, *e.g. planning cutting from sheet materials to minimise waste*

12. use techniques for reinforcing and strengthening structures in their products, *e.g. use triangulation and gussets in frame structures, use fabric reinforcing in bags, clothing and kites*

Systems and control

13. construct simple mechanisms to produce different types of movement, *e.g. use simple levers to move the wings on a bird made from flat card*
14. build simple low-voltage electrical circuits within products, *e.g. add a simple lighting system to a model house that includes a battery, switch and bulbs*
15. use programmable/computer control systems that can create, test, modify and store instructions to control events, *e.g. enter and store instructions in a programmable toy, write a simple programme for a floor turtle, control their products using computer hardware/software.*



Health and safety

Pupils should be taught how to use tools/utensils and equipment safely and to consider the hazards and risks in their activities, behaviour and lifestyle. They should be able to follow instructions to control risk to themselves and others, *e.g. ensure that food preparation areas are scrupulously clean; risk associated with hand tools.*

They should be made aware of the impact on their health and safety of certain behaviour, *e.g. healthy eating.*





Skills

Designing

Pupils should be given opportunities to:

1. use given design briefs, and where appropriate, develop their own to clarify their ideas for products
2. identify and use appropriate sources of information to help generate and develop their ideas for products
3. be creative and innovative in their thinking when generating ideas for their products
4. identify and apply knowledge and understanding about technological, sustainability and health and safety issues to develop ideas for products that are achievable and practical
5. develop a specification/recipe for their product
6. explore, develop and communicate design ideas in a range of ways, including annotation, drawings and CAD, e.g. *clip art libraries, internet resources, scanners, digital cameras*
7. model and refine their design ideas in 3-D form or food prototyping where appropriate



8. evaluate, refine and modify their design ideas as they develop in relation to aesthetics, sensory requirements, healthy lifestyle, function, safety, reliability, properties of materials, ingredients, components, sustainability and cost
9. evaluate their final design ideas against their initial specification/recipe.

Making

Pupils should be given opportunities to:

1. develop the skills to select and work with a range of materials and ingredients to make products in a variety of contexts
2. use hand and machine tools/utensils, and a range of equipment and processes, to mix, shape, form and join materials and ingredients
3. be creative in finding alternative ways of making if the first attempt is not achievable
4. develop techniques to ensure consistency and accuracy including the use of CAM, e.g. *CAM software linked to a cutter/plotter, lathe, milling machine or sewing machine*



Range

Pupils should be given opportunities to develop their design and technology capability through:

- activities in which they investigate, analyse and evaluate products in order to acquire technological and health and safety knowledge and understanding that can be applied in their designing and making
- activities in which they learn about the responsible use of materials considering issues of sustainability
- reflecting on the work of designers, inventors, architects and chefs, including those from Wales



- activities in which they develop and practise particular skills and techniques that can be applied in their designing and making
- activities in which they design and make products, focusing on different contexts and materials.

They should be given opportunities to:

- be creative
- be innovative and enterprising
- work independently and in groups.

Taken together, these activities should cover a range of materials and components, including food, resistant materials, textiles, and include work with systems and control.

5. test and evaluate their product against their original specification/recipe

Food

6. use a broad range of skills, techniques and equipment, as well as standard recipes, to cook meals and products
7. plan and carry out a broad range of practical cooking tasks safely and hygienically
8. apply current healthy eating messages in relation to the nutritional needs of different groups in society and consider issues of sustainability in order to make informed choices when planning, preparing and cooking meals or products 
9. classify food by commodity/group and understand the characteristics of a broad range of ingredients, including their nutritional, functional and sensory properties

Resistant materials and textiles

10. learn about the properties and characteristics of materials and apply this knowledge and understanding when designing and making products
11. undertake materials testing, to determine suitability for intended use

Health and safety

Pupils should be taught how to use tools/utensils and equipment safely and to consider the hazards and risks in their activities. They should be able to follow instructions to control risk to themselves and others, e.g. *electrical tools/utensils, rotating machinery, sewing machines*. When designing and making, pupils should take account of user safety, e.g. *the build quality of products, how hygiene standards should be maintained in the production of a food product*.

12. combine and process materials in order to create enhanced properties and desired aesthetic characteristics

13. understand that loads can cause material failures in structures by bending, twisting and stretching

14. be aware of current developments in materials technology, e.g. 'smart' materials

15. consider issues of sustainability when choosing and using materials 

Systems and controls

16. learn about the properties and characteristics of electrical/electronic and mechanical components and apply this knowledge and understanding when designing and making products

17. interconnect mechanisms to achieve different kinds of movement in products

18. build electronic components into control systems within products

19. understand feedback in control systems

20. design and interconnect systems and sub-systems for application in products

21. build microprocessor and computer control systems into products. 

They should be made aware of the impact on their health and safety of certain behaviour, e.g. *healthy eating*.



Attainment target

Level descriptions

The following level descriptions describe the types and range of performance that pupils working at a particular level should characteristically demonstrate. In deciding on a pupil's level of attainment at the end of a key stage, teachers should judge which description best fits the pupil's performance. Each description should be considered in conjunction with the descriptions for adjacent levels.

By the end of Key Stage 2, the performance of the great majority of pupils should be within the range of Levels 2 to 5, and by the end of Key Stage 3 within the range 3 to 7. Level 8 is available for very able pupils and, to help teachers differentiate Exceptional Performance at Key Stage 3, a description above Level 8 is provided.

Level 1

When designing and making, pupils talk about existing and familiar products in terms of appearance, function, likes and dislikes. They assemble and rearrange given materials, ingredients and components in different ways to make simple constructions and products. They use simple tools/utensils and talk about what they will make and how they will make it.

Level 2

When designing and making, pupils ask questions and suggest ideas for making things based on their examination of familiar products and their experience of using materials, ingredients and techniques. They use pictures and words to convey what they want to do. They manipulate simple tools/utensils and assemble, join and mix materials and ingredients in a variety of ways. Pupils talk about what they like or dislike about what they have made.

Level 3

With guidance, pupils gather given information to support their ideas when designing and making. They draw on their developing knowledge and understanding of materials, ingredients and components to develop their ideas, and begin to consider sustainability issues related to the materials and ingredients they are working with. They use labelled sketches, and/or models to develop and show the detail of their designs. Pupils use simple tools/utensils and techniques to cut, shape, join and mix materials and ingredients. Their products are similar to their design intentions and any changes are identified.

Level 4

When designing and making, pupils gather information independently and use it to help generate a number of ideas. They develop ideas for products recognising that users have views and preferences and consider sustainability. They illustrate alternative ideas using sketches, models and/or ICT, and make choices between them based on their experiences. Pupils outline what they are going to make and how they are going to make it. They select and use appropriate tools/utensils and equipment when working with a range of given materials and ingredients, and produce functional or edible products. They evaluate their work as it develops, making changes when necessary.

Level 5

When designing and making, pupils develop an outline design specification/recipe using supporting information gathered from various sources, and use it to help generate a number of imaginative ideas for products considering the user, health and safety and sustainability. They research a range of their ideas using sketches, models and/or ICT, and make choices between them based on their knowledge and understanding. Pupils produce drawings/patterns/recipes with outline dimensions and sequence what they are going to do. They select and use appropriate tools/utensils and equipment to measure, mark out, cut, join and mix a range of materials and ingredients, and produce products of acceptable quality, function or taste. They evaluate their work as it develops, bearing in mind their original intentions.

Level 6

Pupils identify and use a range of information sources to research and develop a specification/recipe. They recognise the need to refine or change ideas in the light of their research, user needs, health and safety considerations and sustainability. Pupils produce formal drawings/patterns/recipes with details of manufacture using a range of skills, including the use of CAD. They sequence the manufacture of their product and use tools/utensils and equipment accurately, adapting to unforeseen problems. They choose from a range of materials and ingredients and produce products to an appropriate standard of construction, finish or taste. They evaluate the final product comparing it with their original specification/recipe, and suggest improvements.

Attainment target

Level 7

Pupils seek out relevant information sources to research details of their ideas and generate a detailed specification/recipe. Their work demonstrates elements of creativity, innovation and originality, and they modify or change ideas in the light of their research and knowledge and understanding. They consider user needs, health and safety and sustainability when making decisions about their products. They annotate design ideas and, where appropriate, model them in order to aid development. They communicate appropriately, using a range of skills including the use of CAD. Pupils order and sequence the manufacture of their product, and use tools/utensils and equipment with increasing precision, making changes in the light of unforeseen problems. They choose from a range of materials and ingredients, and produce products to a good standard of construction, finish or taste. They evaluate the final product comparing it with their original specification/recipe and identify possible improvements.

Level 8

Pupils are focused and selective when identifying and using research materials, and in the way they explore and evaluate existing products. They demonstrate creativity, innovation and originality in generating and developing design solutions. Pupils are responsive to limitations of cost, user preferences, health and safety, and sustainability. They can cross-reference ideas in their specification/recipe to their research. They use high-level communication skills, including detailed annotation of development sketches, accurate drawings and CAD models. They can sequence manufacture and are becoming increasingly independent in the selection of equipment and potential materials and ingredients. They are able to make products with precision and a high standard of manufacture, finish or taste. They use a range of evaluation strategies, including detailed testing against the specification/recipe, considering user response and future developments.

Exceptional Performance

Pupils systematically seek out information to aid their design thinking, recognising the needs of a variety of client groups. They successfully combine design ideas and concepts from their research to reach creative, innovative and original design solutions that satisfy conflicting demands, including issues of sustainability. They draw on their accumulated knowledge and understanding to arrive at a justifiable optimum solution through modelling, and communicate to others the key features of their designs, together with information that will aid manufacture in a detailed specification/recipe. Pupils produce and work from plans that specify how each stage in the making is to be achieved, and that make best use of the time and resources available. They work with a high degree of precision to make products that are healthy, sustainable, reliable, robust, and that fully reflect the quality requirements and detail given in the specification/recipe. They devise evaluation procedures, use these to indicate ways of improving their products, and implement those improvements.

National curriculum outcomes

The following national curriculum outcomes are non-statutory. They have been written to recognise the attainment of pupils working below Level 1. National Curriculum Outcomes 1, 2 and 3 align with the Foundation Phase Outcomes 1, 2 and 3.

Foundation Phase	National Curriculum
Foundation Phase Outcome 1	National Curriculum Outcome 1
Foundation Phase Outcome 2	National Curriculum Outcome 2
Foundation Phase Outcome 3	National Curriculum Outcome 3
Foundation Phase Outcome 4	National Curriculum Level 1
Foundation Phase Outcome 5	National Curriculum Level 2
Foundation Phase Outcome 6	National Curriculum Level 3

The national curriculum outcomes describe the types and range of performance that pupils working at a particular outcome should characteristically demonstrate. In deciding on a pupil's outcome of attainment at the end of a key stage, teachers should judge which description best fits the pupil's performance. Each description should be considered in conjunction with the descriptions for adjacent outcomes.

Outcome 1

Pupils explore their immediate and familiar environment and use words, signs or symbols to communicate their observations. They recognise themselves and familiar people in pictures and stories and show knowledge of daily routines. Pupils begin to use basic tools and assemble familiar resources.

Outcome 2

Pupils begin to group objects together, recognising similar characteristics. They handle and explore the use of a range of tools and materials safely to make simple constructions. Pupils make straightforward choices and respond to questions ('what?', 'where?') about recent events and familiar stories. They offer their own ideas, sometimes making connections to earlier experiences. Pupils begin to match specific activities to certain times of day or week, and show some appreciation of differences between present and past. They gain confidence in finding their way in familiar surroundings, developing knowledge of roles of familiar people in school and the local community.

Outcome 3

Pupils sort objects and materials according to simple criteria, and with help safely cut, shape and assemble these to make simple products that are meaningful to them. They communicate their developing knowledge of items in everyday use and often ask 'how?' and 'why?' Pupils may suggest where to find information and begin to record their observations and intentions using symbols, pictures, drawings or simple phrases. They take part in the planning of future activities and begin to make predictions by thinking about and talking through earlier experiences. Through enquiry, pupils are able to identify changes in their environment and in materials, natural features, pictures and artefacts. They are able to follow simple instructions and sequence events in stories and creative activities. Pupils are beginning to use everyday terms about their surroundings and the passing of time, remembering significant events in the past and anticipating events in the future.

Notes