

# Unit 2: Practical Conditioning and Use of Flower and Foliage Materials

<b>Unit code:</b>	<b>M/601/9205</b>
<b>QCF Level 3:</b>	<b>BTEC National</b>
<b>Credit value:</b>	<b>5</b>
<b>Guided learning hours:</b>	<b>30</b>

## ● Aim and purpose

This unit aims to develop learners' skills in using and conditioning flower and foliage material and how these are applied in practice. It is designed for learners in centre-based settings looking to progress into the sector or onto further/higher education.

## ● Unit introduction

The importance of correct conditioning, optimum storage and effective stock rotation of incoming flowers and foliages are paramount to the success of a floristry business. Materials that are not handled and treated correctly post harvest will deteriorate quickly and the efficiency of the business will suffer.

This unit develops learners' practical skills in the process of conditioning and preparing fresh floral materials, according to type, for retail sale or commercial use. Learners will need to know the botanical identification and correct post-harvest handling of a wide range of commercial flowers and foliages presented for conditioning. Learners will investigate the importance of flower food products and their uses.

Learners will be expected to carry out a risk assessment in relation to the conditioning process recognise the health and safety issues and implement control measures to minimise risks, and demonstrate safe methods for handling tools and equipment.

Learners will be expected to report on legislation associated with the transport and disposal of waste products and how this is relevant to the retail and freelance florist. an operating statement, that considers sustainability and environmental issues, learners will plan to outline best practice and give logistical guidance on the process of conditioning flowers and foliage in the workplace.

## ● Learning outcomes

**On completion of this unit a learner should:**

- 1 Be able to prepare and condition cut flowers and foliage materials safely
- 2 Be able to store and stock rotate cut flowers and foliage materials.

# Unit content

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## 1 Be able to prepare and condition cut flowers and foliage materials safely

*Risk assessment:* risks to health and safety; control measures to minimise risks; conditioning cut materials within a commercial environment

*Handle and identify cut materials:* commercial cut flowers; foliage materials, correct handling of irritants and/or poisonous materials; good practice when unpacking and handling materials; bruising and damage;

*The conditioning process:* broad range of cut flower and foliage materials; good practice; compliance with health and safety legislation; safe use of tools and equipment; recognised effective methods eg cutting stems at an angle, the use of cold water to dispel air in Chrysanthemum stems, the use of tepid water as appropriate, shallow water depth for hairy stems, immersion for large leaves, use of extension buckets or support frames as necessary, effective use of flower food

*Commercial cut flower food products and use:* cut flower and foliage food products available to improve quality and longevity of cut materials from the grower to consumer use; various manufacturers and solutions for different purposes and cut materials, vase life of cut materials

*Operating statement for the conditioning process:* guidelines to support an effective process for planning, prioritisation and organisation when conditioning cut flowers and foliages; preparation for peak periods; risk assessment, health and safety and the wearing of PPE; the use of chemical cleaning solutions; COSHH; associated environmental and sustainability issues including guidelines for disposal or recycling of green waste, cardboard boxes, auction buckets, protective wrapping, plastic buckets and boxes; the safe disposal of used water containing flower food and chemical solutions

## 2 Be able to store and stock rotate cut flowers and foliage materials

*Store cut flower and foliage materials:* storage for fresh materials; cleaning and disinfecting in accordance with health and safety requirements including COSHH; temperature of storage area, store materials in accordance with individual temperature requirements; priorities for storing materials; labelling materials for specific purposes; protection of delicate material when in storage

*Rotate and monitor cut flower and foliage material:* system of stock rotation that enables materials to be used when at their optimum for their purpose; removal of older materials from storage before cleaning; appropriate checking, re-conditioning or disposing of materials, monitoring of materials in storage on a regular basis; damage, maturity, senescence and botrytis; quantity and cost of any materials not used and disposed of as waste correct positioning and labelling of more mature materials in storage

*Waste disposal:* correct disposal, or recycling, of waste materials eg green waste, cardboard boxes, auction buckets, protective wrapping, plastic buckets and boxes; safe disposal of used water containing flower food and chemical solutions

*Waste disposal legislation:* legal requirements for efficient waste management; duty of care rules for the storage, disposal and transportation of waste materials; safe storage of waste in retail premises, other building, yard or skip requirements for the transportation and disposal of waste; separation of waste materials; Waste Transfer Notes, third party handling; record keeping requirements for the business

## Assessment and grading criteria

In order to pass this unit, the evidence that the learner presents for assessment needs to demonstrate that they can meet all the learning outcomes for the unit. The assessment criteria for a pass grade describe the level of achievement required to pass this unit.

Assessment and grading criteria		
To achieve a pass grade the evidence must show that the learner is able to:	To achieve a merit grade the evidence must show that, in addition to the pass criteria, the learner is able to:	To achieve a distinction grade the evidence must show that, in addition to the pass and merit criteria, the learner is able to:
<p><b>P1</b> carry out a risk assessment for the process of conditioning cut materials within a commercial environment [TW, EP]</p>	<p><b>M1</b> report on flower food products available to improve the quality and longevity of cut materials from harvest to consumer use</p>	<p><b>D1</b> plan a suitable operating statement for the process of conditioning cut flowers and foliages for a retail florist</p>
<p><b>P2</b> demonstrate compliance with health and safety legislation, using tools and equipment, whilst conditioning cut flowers and foliages [TW, EP]</p>		
<p><b>P3</b> identify and handle selected commercial cut flowers and foliage materials, indicating those that are irritant or poisonous [TW, EP]</p>		
<p><b>P4</b> prepare and condition selected cut flower and foliage materials [TW, EP]</p>		
<p><b>P5</b> store cut flower and foliage materials correctly, in accordance with their individual temperature requirements [TW, EP, SM]</p>	<p><b>M2</b> report on current legalisation and record keeping requirements for waste disposal as applicable to retail and freelance floristry businesses</p>	
<p><b>P6</b> stock rotate and monitor cut flower and foliage materials when in storage [TW, EP]</p>		
<p><b>P7</b> dispose of and recycle waste appropriately [TW, EP]</p>		

**PLTS:** This summary references where applicable, in the square brackets, the elements of the personal, learning and thinking skills applicable in the pass criteria. It identifies opportunities for learners to demonstrate effective application of the referenced elements of the skills.

<b>Key</b>	IE – independent enquirers	RL – reflective learners	SM – self-managers
	CT – creative thinkers	TW – team workers	EP – effective participators

# Essential guidance for tutors

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## Delivery

Delivery of this unit will involve practical assessments, written assessments, independent learner research using a range of resources, books, journals and the internet, visits to suitable collections and will link to work experience placements.

This unit links closely with Unit 1: Principles of Flower and Foliage Materials Conditioning and Use and delivery and assessment of the identification of materials spans both units and should not be duplicated. An extensive list of materials for identification is provided, centres can select materials from the list for assessment to suit availability and resources, but learners should be familiar with as many materials on the list as possible. Learners should be given the list to enable them to study independently, as well as to identify and handle materials in taught sessions.

Tutors delivering this unit have opportunities to use as wide a range of techniques as possible. Supervised practical floristry workshops to identify and condition materials, demonstrations of processes and conditioning methods, lectures, discussions, seminar presentations, site visits, internet and/or library-based research and the use of personal and/or industrial experience would all be suitable. Delivery should enthuse, stimulate and motivate learners. Involvement in educational projects, where learners see and handle cut flowers and foliage, will provide an excellent learning opportunity, such as in house or national competitions (UK Skills), open days and demonstrations where learners assist designers. Relevant, industry-related visiting speakers, educational visits and/or study tours, for example IPM Essen, International Hortifair and Flora Holland, will be useful.

Assessment of this unit will involve practical observations, written assessment/assignments, practical assessments to identify materials, projects and presentations with images.

Work placements should be monitored regularly in order to ensure the quality of the learning experience. It would be beneficial if learners and supervisors were made aware of the requirements of this unit before any work-related activities so that naturally occurring evidence can be collected at the time. For example, learners may have the opportunity to condition incoming materials or attend when Dutch lorry wholesalers visit the shop. Learners should ask for observation records and/or witness statements to be provided as evidence of this. Guidance on the use of observation records and witness statements is provided on the Edexcel website.

Whichever delivery methods are used, it is essential that tutors stress the importance of a safe working environment. Health and safety issues relating to working in a floristry environment must be stressed and reinforced regularly. Risk assessments must be undertaken before any practical activities and as part of the assessment process for this unit.

Tutors should consider integrating the delivery, private study and assessment for this unit with other relevant units and assessment instruments learners are taking as part of their programme of study. This unit links with all practical units where flower materials are identified, conditioned and/or stored, and develops practical skills and understanding further.

Learning outcome 1 looks at the process of conditioning. Learners are required to carry out a risk assessment for the conditioning process and put in place, and comply with, measures to minimise the risks to health and safety. Learners will handle and identify, using their botanical names, 50 commercial cut flowers and 20 foliage materials, indicating those that are an irritant or poisonous and including an image. Learners are required to demonstrate the processes involved, correct handling of materials, best practice, specialist methods, and quality recognition. Learners need to report on cut flower food products and plan a suitable operating statement to organise the conditioning process in a retail environment, considering environmental and sustainability issues. Delivery could take place as learners are conditioning incoming materials in a practical session, supplemented with formal lectures. Work experience may offer opportunities for learning and some

activities could be simulated, for example specialist conditioning methods. It is important that learners are exposed to as many live specimens of plant material as possible and do not rely on the internet or other resources for information.

Learning outcome 2 requires learners to demonstrate effective storage and stock rotation methods for flower and foliage materials. They will need to demonstrate the preparation of the storage area, working within health and safety legislation ie COSHH, and prioritise materials for storage. Learners need to operate a stock rotation system, recognise the characteristics of maturing materials, damage and botrytis and act accordingly. Learners are required to follow procedures for the safe disposal of waste materials from the conditioning process. Learners need to report on the legal requirements for efficient waste management, and the storage, transportation and disposal of floristry waste materials. Delivery is likely to be in the form of supervised practical floristry workshop sessions, formal lectures and discussions and independent learner research. It is important that learners have access to a commercial refrigerated storage system designed specifically for flower materials.

## Outline learning plan

The outline learning plan has been included in this unit as guidance and can be used in conjunction with the programme of suggested assignments.

The outline learning plan gives **an indication of the volume of learning it would take the average learner** to achieve the learning outcomes. It is **indicative and is one way of achieving the credit value**.

Learning time should address all learning (including assessment) relevant to the learning outcomes, regardless of where, when and how the learning has taken place.

Topic and suggested assignments/activities and/assessment
Introduction to the unit. Discuss health and safety issues and outline risk assessment procedures.
Carry out risk assessments and ensure measures to limit risks to health and safety are in place.
Demonstrate the correct use and handling of tools and equipment, correct conditioning techniques as discussed and practised.
Identification and handling of cut materials – as listed.
Demonstrate the correct methods of storage, at the correct temperatures, and a system of stock rotation for flower and foliage material.
Plan ways to minimise floral waste, investigate waste disposal including relevant legislation and implement a waste management system.
<b>Assignment 1: Plan to Condition Cut Flowers and Foliage Materials</b> (P1, M1, M2, D1) Risk assessment, the commercial use of flower food, legislation relating to waste management, conditioning guidelines.
<b>Assignment 2: The Conditioning, Storage and Monitoring Process Undertaken</b> (P2, P3, P4, P5, P6, P7)

## Assessment

For P1, M1, M2 and D1, learners must conduct a risk assessment for the process of conditioning and identify control measures to minimise risks to health and safety. Learners will report on the flower food products available to the industry and the legislation governing the disposal of waste. They will also prepare guidelines for the conditioning process. This could be assessed through the production of a manual or operating policy statement giving guidelines on the conditioning process. An appendix could contain the risk assessment, a report on flower food products and recommendations for their use, and guidance on waste disposal legislation. Evidence could be presented as a spiral bound manual.

For P2, P3, P4, P5, P6 and P7, learners need to demonstrate the correct handling and conditioning of cut materials, the process, best practice and specialist methods. Learners should identify 50 commercial cut flowers and 20 foliage materials. They would need to identify the botanical name, if the material is known to be poisonous or an irritant and include an image. Learners also need to demonstrate an effective storage and stock rotation system. Evidence could be presented as a training aid for floristry staff in the form of a movie clip, booklet/leaflet, PowerPoint presentation, storyboard or a professionally presented media article. Suitable tutor observations records of the practical process could be used as additional evidence.

Although it is suggested that a minimum of 50 commercial cut flowers and 20 foliage materials should be handled and identified across the flower and foliage lists, it is important that learners have access to as wide a range as possible. The identification of cut materials across both conditioning units should not be duplicated.

### Programme of suggested assignments

The following table shows a programme of suggested assignments that cover the pass, merit and distinction criteria in the grading grid. This is for guidance and it is recommended that centres either write their own assignments or adapt any Edexcel assignments to meet local needs and resources.

Criteria covered	Assignment title	Scenario	Assessment method
P1, M1, M2, D1	Plan to Condition Cut Flower and Foliage Materials	You are required to prepare an operating statement for the conditioning process for a retail floristry business (include a risk assessment, flower food products and waste disposal legislation).	Report. Policy statement. Manual.
P2, P3, P4, P5, P6, P7	Document the Conditioning, Storage and Monitoring Process.	You are required to document the conditioning process, to include identification, storage and stock rotation of materials, and present this as a training aid for new members of staff.	Movie clip. PowerPoint presentation. Booklet/leaflet. Storyboard. Media article.

### Links to National Occupational Standards, other BTEC units, other BTEC qualifications and other relevant units and qualifications

This unit forms part of the BTEC Land-based sector suite. This unit has particular links with:

Level 2	Level 3
Identification and Use of Flowers and Foliage	Principles of Flower and Foliage Materials Conditioning and Use

### Essential resources

Learners will need access to research resources, books, periodicals, specialist publications, CD ROMs and the internet. Classrooms with the facilities to deliver presentations to professional standards using the latest technology would motivate learners. Visits to floristry events in the UK and abroad, for example International Hortifair, IPM-Essen, and to wholesalers and growers would be useful.

Learners will need regular access to a commercial range of seasonal fresh flowers and foliage materials and to

a suitable area with a water supply for preparing and conditioning cut flowers and foliage.

Equipment should include flower buckets, expansion buckets or frames, vases, flower and foliage food, suitable height tables/work surfaces, and refrigerated storage facilities. Suitable arrangements should be in place to dispose of or recycle waste in accordance with legislation.

Tools should include (ensuring compliance with, Criminal Justice Act 1998 and Knives Act 1997), floristry scissors, knives, and secateurs and plastic rose thorn strippers.

Learners should have access to PPE including aprons/tabards and protective gloves as appropriate.

## Employer engagement and vocational contexts

Centres are encouraged to develop links with the floristry industry to give learners an insight into commercial methods and principles. This may be through floristry shops, wholesalers and Dutch flower lorries etc.

## Indicative reading for learners

### Textbooks

Batho R, Kay J and Waugh B – *The Advanced Guide to Floristry* (Murdoch Books, 1998) ISBN 9781853915178

Batho R, Kay J and Waugh B – *The Beginner's Guide to Floristry, 2nd Edition* (Murdoch Books, 2001) ISBN 9781853917875

Foliage for Florists, 2nd Edition (The Society of Floristry, 2006) ISBN 9780955304309

Nowak J – *Post harvest Handling and Storage of Cut Flowers* (Timber Press 1990) ISBN 9780881921564

Vaughan M – *The Complete Book of Cut Flower Care* (Timber Press, 1998) ISBN 9780881924121

### Publications and audio-visual materials

*Care and Handling video* – Flower Council of Holland

*Cut Flower booklet* – Flower Council of Holland

*Cut Flower Care booklet* – Flower Council of Holland

### Websites

[www.businesslink.com](http://www.businesslink.com)

Business Link

[www.floraholland.com](http://www.floraholland.com)

Flora Holland

[www.flowercouncil.org](http://www.flowercouncil.org)

Flower Council of Holland

[www.flowers.org.uk](http://www.flowers.org.uk)

The Flowers and Plants Association

## Flower and Foliage Materials Lists

### BASIC COMMERCIAL MATERIALS

#### FLOWERS

Aconitum napellus

Agapanthus

Allium

Alstroemeria

Anemone coronaria

#### FOLIAGES

Arachnoides adiantiformis

Asparagus setaceus

plumosus

Asparagus umbellatus

Aspidistra elatior



## FLOWERS

Anigozanthus  
Anthurium andreanum  
Aster spp  
Bouvardia  
Bupleurum griffithi  
Campanula spp  
Carthamus tinctorius  
Celosia argentea cristata  
Chamelaucium uncinatum  
Chrysanthemum indicum  
Cymbidium Orchid  
Dahlia  
Delphinium ajacis  
Dendrobium  
Dianthus caryophyllus  
Eremurus  
Eryngium  
Euphorbia fulgens  
Eustoma russellianum  
Freesia  
Gerbera  
Gladiolus  
Gloriosa rothschildiana  
Gypsophila paniculata  
Helianthus annuus  
Hippeastrum  
Heliconia caribaea  
Hyacinthus orientalis  
Iris hollandica  
Lathyrus odoratus  
Liatris spicata  
Lilium (Asiatic hybrids)  
Lilium longiflorum  
Lilium (Oriental hybrids)

## FOLIAGES

Buxus sempervirens  
Chamaecyparis lawsoniana  
Eucalyptus cinerea  
Eucalyptus parvifolia  
Fatsia japonica  
Galax aphylla  
Gaultheria shallon  
Hedera spp  
Hosta  
Hypericum  
Ilex spp  
Myrtus communis  
Philodendron 'Xanadu'  
Pittosporum tobira  
Pittosporum tenuifolium  
Prunus spp  
Ruscus hypophyllum  
Salix babylonica 'Tortuosa'  
Viburnum tinus  
Xerophyllum tenax

## FLOWERS

Limonium sinuatum  
Mathiola incana  
Molucella laevis  
Narcissus  
Nerine bowdenii  
Ornithogalum thyrsoides  
Phlox  
Ranunculus  
Rosa  
Scabiosa caucasica  
Scilla  
Sedum spectabile  
Solidago  
Syringa vulgaris  
Trachelium caeruleum  
Triteleia corrina  
Tulipa spp  
Veronica  
Zantedeschia

## FOLIAGES

### **CUT FLOWERS – EXTENDED COMMERCIAL MATERIALS**

Achillea filipendulina	Leucadendron
Acacia dealbata	Lilium (3xAsiatic hybrids)
Ageratum	Lilium (3xOriental hybrids)
Alchemilla mollis	Limonium hybrids
Allium sphaerocephalon	Lunaria annua
Alstroemeria (5x Cultivars)	Lysimachia clethroides
Amaranthus caudatus	Mentha
Ammi majus	Monarda
Asclepias tuberosa	Muscari
Astilbe	Narcissus hybrids
Astrantia major	Nigella damascena
Banksia	Oenothera
Calendula officinalis	Oncidium Orchid
Callistephus chinensis	Origanum vulgare

## CUT FLOWERS – EXTENDED COMMERCIAL MATERIALS

Campanula glomerata	Ornithogalum arabicum
Cattleya Orchid	Paeonia lactiflora
Celosia argentea plumosa	Papaver somniferum
Centaurea cyanus	Papaver nudicaule
Chrysanthemum indicum (x8 Cultivars)	Paphiopedilum
Convallaria majalis	Physalis
Craspedia	Physostegia virginiana
Crocsmia	Polianthes tuberosa
Curcuma	Protea
Delphinium hybrids	Ranunculus
Dianthus barbatus	Rosa (5x Cultivars)
Dianthus caryophyllus (5x Cultivars)	Rudbeckia
Digitalis	Sandersonia
Eustoma russellianum (3x Cultivars)	Saponaria
Forsythia intermedia	Scabiosa
Freesia (3x Cultivars)	Scilla
Fritillaria meleagris	Sedum spectabile
Genista fragrans	Solidaster luteus
Gerbera (5x Cultivars)	Spirea
Gladiolus colvillei	Stephanotis floribunda
Gloriosa rothschildiana	Stillingia
Godetia grandiflora	Strelitzia reginae
Gomphrena globosa	Tagetes
Helenium	Tanacetum parthenium
Helichrysum bracteatum	Trollius
Heliconia pendula	Tulipa (5x Cultivars)
Helleborus niger	Vanda Orchid
Hydrangea macrophylla	Viburnum opulus
Ilex verticillata	Zantedeschia (5x Cultivars)
Ixia	Zinnia elegans
Kniphofia	

## CUT FLOWERS – EXTENDED COMMERCIAL MATERIALS

Lavandula

Leucospermum

## FOLIAGES, BERRIES AND FRUITS

Ananas comosus

Anthurium andreaeanum

Asparagus asparagoides

Asparagus densiflorus

Asparagus virgatus

Brassica oleracea

Brunia albiflora

Callicarpa

Camellia japonica

Capsicum annum

Chamaecyparis

Chamaedorea

Chamaerops

Cornus alba

Corylus avellana

Cotinus coggyria

Cyperus glaber

Cyperus papyrus

Dracaena sanderiana

Equisetum hyemale

Gossypium

Grevillea

Hibiscus trionum

Laurus nobilis

Ligustrum

Liriope muscari

Mahonia

Malus

Panicum grass

Pennisetum

Phormium tenax

Photinia fraseri

Pinus strobes

Pistacia

Prunus laurocerasus

Quercus

Rhododendron

Rosmarinus officinalis

Ruscus hypoglossum

Setaria grass

Skimmia japonica

Sphagnum

Strelitzia reginae

Symphoricarpus

Tillandsia usneoides

Triticum grass

Tsuga heterophylla

Typha latifolia

Weigela florida

Zea

## Delivery of personal, learning and thinking skills (PLTS)

The following table identifies the PLTS opportunities that have been included within the assessment criteria of this unit:

Skill	When learners are ...
<b>Team workers</b>	showing fairness and consideration to others when carrying out the conditioning process taking responsibility, showing confidence in themselves and their contribution, when carrying out the conditioning process with peers
<b>Self-managers</b>	organising time and resources and prioritising conditioning tasks anticipating, taking and managing risks as appropriate
<b>Effective participators</b>	proposing ways to manage the conditioning process when participating with others identifying improvements to processes that would benefit others as well as themselves.

Although PLTS opportunities are identified within this unit as an inherent part of the assessment criteria, there are further opportunities to develop a range of PLTS through various approaches to teaching and learning.

Skill	When learners are ...
<b>Independent enquirers</b>	taking part in discussions and peer evaluation
<b>Creative thinkers</b>	planning and sourcing information to produce a manual for flower and foliage materials
<b>Reflective learners</b>	evaluating processes during conditioning
<b>Team workers</b>	working with others to carry out the process of conditioning and resolve problems
<b>Self-managers</b>	managing time and producing completed work in the required format for assessment
<b>Effective participators</b>	working in a group, as required, contributing to peer evaluation and discussions.

## ● Functional Skills – Level 2

Skill	When learners are ...
<b>ICT – Use ICT systems</b>	
Select, interact with and use ICT systems independently for a complex task to meet a variety of needs	<ul style="list-style-type: none"> <li>formulating evidence of their understanding</li> <li>planning and completing portfolios, including images, text and number</li> </ul>
Use ICT to effectively plan work and evaluate the effectiveness of the ICT system they have used	<ul style="list-style-type: none"> <li>using PowerPoint for presentations, software for the production of a Photobook for cut materials portfolio and programmes to format images (Photoshop)</li> <li>saving work in progress</li> </ul>
Manage information storage to enable efficient retrieval	<ul style="list-style-type: none"> <li>using USB and other removable storage devices</li> <li>organising information into files on computer hard drive</li> </ul>
Follow and understand the need for safety and security practices	<ul style="list-style-type: none"> <li>using software for internet security</li> <li>understanding health and safety regulations controlling computer use</li> <li>following good practice such as setting up their workstation well and taking breaks in intensive work</li> </ul>
Troubleshoot	<ul style="list-style-type: none"> <li>using task manager and the control panel</li> <li>using the help function</li> </ul>
<b>ICT – Find and select information</b>	
Select and use a variety of sources of information independently for a complex task	<ul style="list-style-type: none"> <li>using a camera card or USB storage device for their images of cut materials portfolio</li> <li>using spellchecker, thesaurus and research, functions</li> </ul>
Access, search for, select and use ICT-based information and evaluate its fitness for purpose	<ul style="list-style-type: none"> <li>carrying out multiple internet searches for cut materials, flower food products, waste disposal and other information</li> </ul>

Skill	When learners are ...
<b>ICT – Develop, present and communicate information</b>	
Enter, develop and format information independently to suit its meaning and purpose including: <ul style="list-style-type: none"> <li>• text and tables</li> <li>• images</li> <li>• numbers</li> <li>• records</li> </ul>	<ul style="list-style-type: none"> <li>formulating photographic evidence</li> <li>producing tables to show information</li> <li>producing PowerPoint presentations including images</li> <li>creating Photobook for 'identification of materials' portfolio</li> <li>producing spreadsheets to allocate tasks</li> <li>producing tables or spreadsheets to record information</li> </ul>
Bring together information to suit content and purpose	producing assignments to include ICT formulated evidence
Present information in ways that are fit for purpose and audience	presenting assignment work and portfolios
Evaluate the selection and use of ICT tools and facilities used to present information	evaluating the use of ICT as part of their assignment work
Select and use ICT to communicate and exchange information safely, responsibly and effectively including storage of messages and contact lists	<ul style="list-style-type: none"> <li>sending receiving email with attachments as evidence of contacts</li> <li>complying with data protection regulations</li> <li>storing sensitive material safely and securely</li> </ul>
<b>Mathematics</b>	
Understand routine and non-routine problems in a wide range of familiar and unfamiliar contexts and situations	<ul style="list-style-type: none"> <li>costing materials</li> <li>calculating retail flower prices from wholesale invoices</li> <li>applying percentage formula for VAT and profit margins</li> </ul>
Identify the situation or problem and the mathematical methods needed to tackle it	<ul style="list-style-type: none"> <li>calculating different methods of costing</li> <li>calculating VAT/profit margins</li> </ul>
Select and apply a range of skills to find solutions	<ul style="list-style-type: none"> <li>understanding percentages using a calculator and by mental arithmetic</li> <li>using formulae to calculate retail cost of materials</li> </ul>
Use appropriate checking procedures and evaluate their effectiveness at each stage	<ul style="list-style-type: none"> <li>using a calculator</li> <li>using IT programmes to produce spreadsheets with formulae to calculate costs</li> </ul>
Interpret and communicate solutions to practical problems in familiar and unfamiliar routine contexts and situations	showing all workings to reach final costings
Draw conclusions and provide mathematical justifications	evaluating the commercial viability of materials

Skill	When learners are ...
<b>English</b>	
Speaking and listening – make a range of contributions to discussions and make effective presentations in a wide range of contexts	<p>discussing and presenting ideas with peers</p> <p>evaluating and posing questions and offering solutions to others</p> <p>listening and formulating conclusions, modifying attitudes to subjects previously not understood</p>
Reading – compare, select, read and understand texts and use them to gather information, ideas, arguments and opinions	<p>researching information through books, the media and the internet</p> <p>identifying relevant information and summarising it in a way relevant to its purpose</p>
Writing – write documents, including extended writing pieces, communicating information, ideas and opinions, effectively and persuasively	producing reports, assignment essays, PowerPoint presentations, spreadsheets and tables to communicate previously sourced information.