

Unit 118: Repeat Pattern

Code:	J/502/5436
QCF Level 3:	BTEC National
Credit value:	10
Guided learning hours:	60

● Aim and purpose

The aim of the unit is to give learners the opportunity to develop skills and understanding of surface pattern ideas as repeat patterns. Learners will research design ideas and the work of other designers and textiles artists in addition to developing their own work using traditional and non-traditional materials and a variety of techniques and processes.

● Unit introduction

Pattern repeat has been used to decorate surfaces throughout the history of art, craft and design. It has been applied in a variety of ways by different cultures and has a range of meanings and purposes. Sometimes pattern is meant to illuminate, to draw attention to an object or person; at other times it is used to disguise. It has been used in ritual, design, decoration, objects of high value, and communication.

This unit explores the practical application of repeating patterns within textile design areas such as knit, weave, print and embroidery. Learners will be encouraged to be inventive when exploring the potential of repeats and demonstrating a creative and innovative application of techniques and processes in order to develop a variety of textile design work.

This unit provides learners with the opportunity to use primary and secondary source material to generate design ideas; research pattern and the work of other artists and designers in order to establish the principles of repeat pattern, to explore practical techniques and processes in the production of samples to and reflect on their work and evaluate strengths and areas for development.

● Learning outcomes

On completion of this unit a learner should:

- 1 Be able to use source materials to inform design ideas
- 2 Be able to investigate the principles of repeat pattern
- 3 Be able to develop ideas using repeat pattern
- 4 Understand own repeat pattern work.

Unit content

1 Be able to use source materials to inform design ideas

Use source materials: artists; designers; visual language eg William Morris, Escher, Crysede, Zandra Rhodes, Celia Birtwell; natural patterns eg shadows, reflections, pine cones, stacks; historical examples eg Islamic tiles, Tudor timber buildings, textile archives; contemporary examples

Record: select; draw; photograph

Primary sources: eg life, natural and constructed world, exhibitions, museum collections

Secondary sources: eg libraries, photographs, publications (paper-based, online), audio-visual sources, internet sites

2 Be able to investigate the principles of repeat pattern

Principles of repeat pattern: eg repeat formats, appearance, alteration, pattern repeats, colour combinations, visual effect, scale, production methods, product, surface, print materials; geometry eg block, square, brick, diamond, border; drop eg half-drop, mirror; satin eg scatter, rotating, all-over; ogee eg distortion, waved, scallop

3 Be able to develop ideas using repeat pattern

Develop ideas: design techniques; processes eg pattern repeats; processes eg drawing, painting, collage; techniques eg inter-cutting, tracing, stencilling, surface manipulation, computer aided; textile applications; knit eg Aran, Fair Isle, intarsia; weave eg hand loom, tapestry, jacquard; print eg screen, stencil, block; embroidery eg appliqué, patchwork, filling stitch, machine; samples; techniques; processes; health and safety guidelines and procedures

4 Understand own repeat pattern work

Ideas and processes: eg subjects, influences; refinements to ideas; development; outcomes; working to a brief eg fashion, interior, accessories; personal work eg freestanding structures, hangings, installations, soft sculptures; presentation; successes; failures; workarounds; working practices; use of media and techniques; quality; aesthetics; function; test results; own views; feedback from others; response

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:
P1 research source material to inform design ideas [IE, CT]	M1 research diverse source materials to inform coherent investigations of the principles of repeat pattern	D1 research independently source materials inform design ideas
P2 investigate the principles of repeat pattern [IE, CT]	M2 originate and develop coherent and considered ideas using repeat pattern	D2 show independence in producing visually stimulating and innovative samples
P3 develop ideas using repeat pattern [IE, CT, RL]	M3 analyse ideas and processes used to develop samples.	D3 evaluate research, ideas and working processes.
P4 review ideas and processes used in own repeat pattern work. [CT, RL, SM]		

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.

Key	IE – independent enquirers CT – creative thinkers	RL – reflective learners TW – team workers	SM – self-managers EP – effective participators
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Essential guidance for tutors

Delivery

At the start of the unit tutors should introduce learners to examples of repeat pattern. This can be delivered through short lectures, by visiting exhibitions or presentations focusing on specific examples of designers' work, and a range of the possible applications of repeat pattern, such as designs for wall coverings, tiles, floors, ceilings, papers, accessories and so on. Learners should be encouraged to explore pattern across different cultures and artefacts. Although the unit explores textiles, there is a wealth of pattern applied in architecture across the world. The use of visual elements in textiles can be reinforced through learners viewing examples of repeat pattern applied in a wider context.

Evidence for learning outcomes 1 and 2 should show that learners have researched primary and secondary source materials that can be developed into ideas for repeat pattern designs. Learning outcome 1 and 2 can be delivered through research-based tasks. The work should be accompanied by annotation.

Learning outcome 3 involves learners in working through their visual research from learning outcomes 1 and 2 to develop ideas for repeat pattern work. Tutors need to demonstrate relevant techniques, technologies and processes to learners. This will provide learners with the knowledge and skills they require to investigate and explore repeat pattern. Learners should be encouraged to explore a wide range of ideas and processes, using a variety of mark-making and embellishment techniques. Experiments and ideas should relate to the initial visual research and learners should be given the opportunity to work their ideas in different scales. In this way they will gain knowledge of the suitability of their visual research for development, and form opinions as to which processes and techniques they can use to produce their samples, and subsequently their final outcomes. Learners will be expected to show examples of repeat pattern, both in paper designs and in a selection of practical textile work generated in response to design ideas, briefs and personal interest. Initial ideas should be explored in sketchbooks before being developed into a range of experimental sample pieces that investigate different pattern structures. Assignments used should place emphasis on the development and conveyance of ideas through practical experimentation with media, materials, techniques and processes. The use of colour should be considered as an essential element in the creation of designs. Learners should be taught any relevant health and safety guidance relevant in specialist studios, and when operating specialist equipment.

Learning outcome 4 can overlap with learning outcome at certain relevant stages. Learners should gain an understanding of their own work and use this understanding to refine the direction of their ideas and choice of materials and processes. This can be delivered through a blend of short mid-point group critiques and one-to-one tutorials. Learners should record all aspects of feedback alongside their personal judgements and conclusions in a suitable sketchbook or work journal.

Attention should be paid to health and safety considerations throughout the delivery of the unit. At demonstrations and inductions tutors should ask learners to record points relating to potential harm, and any tutor handouts should be stored to provide reference material for future use.

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 demonstrates one way in planning the delivery and assessment of this unit.

Topic and suggested assignments and activities
Introduction to unit and assignment briefs.
Assignment 1: Principles of Repeat Pattern Lecture and presentation on repeat pattern. Learners: <ul style="list-style-type: none">• research on primary source material to generate design ideas• research on secondary source material to generate design ideas• investigating the principles of repeat pattern• evaluate research and design work undertaken.
Learner-initiated study.
Assignment 2: Using Repeat Pattern Learners: <ul style="list-style-type: none">• develop design ideas• put together portfolio of techniques• investigate the techniques of repeat pattern• develop repeat pattern within space constraints• evaluate design work, samples and outcomes• present ideas• take part in group critique.
Learner-initiated study.
Assignment 3: Repeat Pattern Scenario Learners: <ul style="list-style-type: none">• research and generate design ideas to given constraints and requirements• develop design ideas• produce samples• evaluate and refine ideas• produce final outcome• present work• take part in group critique.
Learner-initiated study.
Review of unit and assessment.

Assessment

When applying the grading criteria tutors should follow the advice given below. Please note that the examples of evidence given here are indicative only. The advice is not inclusive and the examples need not be included in a learner's work in order for the learner to achieve the exemplified grade

To achieve P1, learners should research source material, both primary and secondary, to generate ideas for the design of repeat pattern. This will give learners the scope and range of possible applications of repeat pattern. Learners should present their research work in a portfolio providing visual evidence and accompanied by annotation.

To achieve P2, learners must investigate the principles and key features of repeat pattern. They should communicate their intentions clearly and explain how their ideas will be developed of further. The principles of pattern repeat will be identified using a limited understanding of the visual characteristics of the subject.

For P3, learners should demonstrate a basic ability to develop ideas using repeat pattern. There should be some controlled use of visual elements and formal design skills.

For P4, learners need to review the ideas and processes used in their work. They should explain how the review has changed the direction of their ideas about processes and subjects. They must show some skill in using textiles-related techniques. Learners must produce a range of samples that show limited understanding and application of the principles of repeat pattern.

For M1, learners must research diverse primary and secondary source materials to inform coherent investigations of the principles of repeat pattern. This should take the form of portfolio work or sketchbook work which is well presented and coherent. Learners must show independence in continuing research into pattern repeat. Work produced must show a definite understanding of the principles of pattern repeat. The characteristics of visual language used must be understood and explained.

To achieve M2, learners must show individuality in producing practical samples. These must demonstrate skill and engagement with the different processes involved. Learners must show understanding of the visual characteristics of samples, and identify differences between techniques.

To achieve M3, learners must effectively analyse their work. Reviews must show clear understanding of the stages of review and refinement. Learners must show knowledge processes and techniques used. Areas for development may be identified, but actions to remedy problems may not always be explained.

For D1, learners must demonstrate a high level of research skills which have been independently sourced.

To achieve D2, learners must demonstrate a high level of understanding of the key principles of repeat pattern and a high level of technical skills. There must be clear links between research and application that are explored in the practical work. Samples produced must be visually stimulating and creative.

To achieve D3, learners must show an in-depth comprehension of the principles of pattern repeat. Learners must enable ideas, techniques and processes used, and work produced, using fluent verbal and visual language. Conclusions reached must be well informed and coherent, showing a clear understanding of the visual characteristics of pattern repeat.

Programme of suggested assignments

The table below shows a programme of suggested assignments that cover the pass, merit and distinction criteria in the assessment and 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, P2, P3, P4 M1, M2 D1, D2, D3	Assignment 1: Principles of Repeat Pattern	Designer creates portfolio for presentation at interview.	Lecture notes. Research on primary source material. Research on secondary source material. Investigation into principles of repeat pattern. Evaluation of work undertaken.
P4, M3, D3	Assignment 2: Using Repeat Pattern	Designer creates portfolio for presentation at interview.	Development of design ideas. Samples of techniques. Samples of repeat pattern within space constraints. Evaluation of design work and samples. Presentation of work and participation in group critique.
P1, P2, P3, P4 M1, M2, M3 D1, D2, D3	Assignment 3: Repeat Pattern Scenario	Designer creates pattern ideas for a given scenario fashion garment.	Research. Design ideas to requirements. Samples. Evaluation of ideas. Final outcome. Participate in presentation of work and group critique.

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

This unit forms part of the BTEC Art and Design sector suite. This unit has particular links with the following units in the BTEC Art and Design suite:

Level 1	Level 2	Level 3
Introduction to Graphic Materials, Techniques and Processes	2D Visual Communication	Exploring Specialist Textile Techniques
Introduction to Creative Drawing	Working with Textile Briefs	Printed Textiles for Fashion and Clothing
		Surface Pattern

Links to National Occupational Standards:

- O46ND5 Contribute to realising design prototypes for textiles and materials
- 046DI0 Developing alternative textile and material design ideas
- O8NSAS1 Communicate effectively
- CA9 Keep up to date with developments within the arts
- CVI0 Identify and describe items of cultural interest

Essential resources

This unit is predominately studio or workshop based, and centres need to provide sufficient workspace and facilities for learners to develop work in printed, constructed and embroidered textiles. Learners also need access to paper-based design studios. Library resources in the form of visual material should be available to provide stimulating sources to enhance creative outcomes. Learners should be encouraged to visit exhibitions and view the work of other artists.

Employer engagement and vocational contexts

Centres should develop links with practising artists, craftspeople and designers, to deliver assignments to learners or to provide work experience.

Links with employers are essential to the delivery of the programme for work experience and future employment.

Vocational learning support resources:

- Learning and Skills Network – www.vocationallearning.org.uk

Business and finance advice:

- local and regional Business Link – www.businesslink.gov.uk

Assignments should be vocationally relevant; centres should consider the delivery of 'live projects', for example, to support the vocational content of the unit and programme.

Creative and Cultural Skills (www.ccskills.org.uk), the Sector Skills Council for Arts, Crafts and Design, has launched the web portal Creative Choices (www.creative-choices.co.uk). This portal has a range of information about careers in the arts, crafts and design sector, including job descriptions.

Skillfast-UK, the Sector Skills Council for Fashion and Textiles (www.skillfast-uk.org), provides details on careers (www.skillfast-uk.org/justthejob) and the industry and has regularly updated news and events pages.

Indicative reading for learners

Textbooks

Fish J – *Designing and Printing Textiles* (The Crowood Press, 2005) ISBN 978-1861267764

Geijer A – *A History of Textile Art* (Sotheby's Publications, 1979) ISBN 978-0856670558

Harker G – *Creative Machine Embroidery* (Batsford, 2003) ISBN 978-0713488784

Jerstorp K and Kohlmark E – *The Textile Design Book: Understanding and Creating Patterns Using Texture Shape and Colour* (A & C Black, 2000) ISBN 978-0713650549

McNamara A and Snelling P – *Design and Practice for Printed Textiles* (Oxford University Press, 1995) ISBN 978-0195533712

Meller S and Elfers J – *Textile Designs: 200 Years of Patterns for Printed Fabrics Arranged by Motif, Colour, Period and Design* (Thames & Hudson, 2002) ISBN 978-0500283653

Phillips P and Bunce G – *Repeat Patterns: A Manual for Designers, Artists and Architects* (Thames & Hudson, 1993) ISBN 978-0500276877

Rhodes Z – *A Lifelong Love Affair with Textiles* (Antique Collector's Club and Zandra Rhodes Publications, 2005) ISBN 978-1851494866

Spencer D J – *Knitting Technology: A Comprehensive Handbook and Practical Guide: A Comprehensive Handbook and Practical Guide to Modern Day Principles and Practices* (Woodhead Publishing, 2001) ISBN 978-1855733336

Waterman V A – *Surface Pattern Designs: A Handbook of How to Create Decorative and Repeat Patterns for Designers and Students* (Hastings House Publications, 1984) ISBN 978-0803867796

Wolff C – *The Art of Manipulating Fabric* (KP Books, 1996) ISBN 978-0801984969

Yates M – *Textiles: A Handbook for Designers* (WW Norton and Company, 1996) ISBN 978-0393730036

Journal

World of Interiors

Websites

www.craftscouncil.org.uk

Crafts Council

www.design-council.org.uk

Design Council

www.designmuseum.org

Design Museums

www.vam.ac.uk

Victoria and Albert Museum

Delivery of personal, learning and thinking skills

The table below identifies the opportunities for personal, learning and thinking skills (PLTS) that have been included within the pass assessment criteria of this unit.

Skill	When learners are ...
Independent enquirers	researching primary source materials to generate design ideas researching secondary source materials to generate design ideas independently researching other source materials independently investigate key principles of repeat pattern
Creative thinkers	developing creative ideas using repeat pattern developing creative repeat pattern samples
Reflective learners	reviewing and refining ideas and samples evaluating work produced
Team workers	working to meet assignment deadlines producing work to meet assessment criteria
Self-managers	participating in group critiques participating in group discussion and activities
Effective participators	researching primary source materials to generate design ideas researching secondary source materials to generate design ideas independently researching other source materials independently investigate key principles of repeat pattern.

Although PLTS 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 ...
Independent enquirers	independently researching source materials independently researching the work of other artists work independently to develop ideas and samples
Creative thinkers	being experimental and creative in approach to new ideas
Reflective learners	reflecting on work undertaken and diversify to incorporate other ideas
Team workers	working as part of a team/group to generate other ideas
Self-managers	working to constraints of budget and time setting individual aims
Effective participators	encouraging peers to participate in extra curricular activities.

● Functional Skills – Level 2

Skill	When learners are ...
ICT – Find and select information	
Select and use a variety of sources of information independently for a complex task	researching primary and secondary source materials to inform ideas
Access, search for, select and use ICT-based information and evaluate its fitness for purpose	
ICT – Develop, present and communicate information	
Enter, develop and format information independently to suit its meaning and purpose including: <ul style="list-style-type: none"> • text and tables • images • numbers • records 	collating, selecting and sorting information to support work undertaken evaluating work and presenting to a specified audience
Bring together information to suit content and purpose	
Present information in ways that are fit for purpose and audience	
Mathematics	
Understand routine and non-routine problems in a wide range of familiar and unfamiliar contexts and situations	producing repeat pattern designs within a given space or measurement constraints
Identify the situation or problem and the mathematical methods needed to tackle it	
Select and apply a range of skills to find solutions	
Use appropriate checking procedures and evaluate their effectiveness at each stage	
Interpret and communicate solutions to practical problems in familiar and unfamiliar routine contexts and situations	
Draw conclusions and provide mathematical justifications	
English	
Speaking and listening – make a range of contributions to discussions and make effective presentations in a wide range of contexts	participating in discussion, group critique and/or presentation
Reading – compare, select, read and understand texts and use them to gather information, ideas, arguments and opinions	reading and undertaking research activities to inform ideas
Writing – write documents, including extended writing pieces, communicating information, ideas and opinions, effectively and persuasively.	presenting, evaluation of work undertaken.