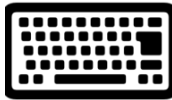


Cynllunio Gweithgareddau Dylunio a Thechnoleg

Planning Activities for Design Technology

Pynciau Traddodiadol / Traditional Subjects



Gwyddoniaeth;
Dylunio a Thechnoleg;
Technoleg Gwybodaeth

Science;
Design and Technology;
Information Technology

(dysgwyr uchelgeisiol, galluog) cael gwybodaeth a dealltwriaeth dda o gysyniadau allweddol mewn gwyddoniaeth; datblygu sgiliau mewn arsylwi, ymchwili a meddwl yn feirniadol; dysgu sgiliau er mwyn defnyddio technolegau'n greadigol

(ambitious, capable learners) gaining a solid base of knowledge and understanding of key concepts in science; developing skills in observation, research and critical thinking; becoming skilled in the creative use of technologies

(cyfranwyr mentrus, creadigol) cynllunio prosesau a chreu cynhyrchion ac eitemau digidol; cydweithio ag eraill i ddatblygu datrysiadau dyfeisgar a chreu nwyddau ar gyfer y farchnad

(enterprising, creative contributors) designing processes and creating digital products and objects; working with others to develop novel solutions and to create products for the marketplace

(dinasyddion egwyddorol, gwybodus) gwerthuso effaith datblygiadau gwyddonol a thechnolegol; mabwysiadu safbwyntiau personol gwybodus ar faterion moesegol sy'n gysylltiedig ag arloesedd gwyddonol a thechnolegol

(ethical, informed citizens) evaluating the impact of scientific and technological developments; taking informed personal stances on ethical issues associated with scientific and technological innovation

(unigolion iach, hyderus) dysgu i ddefnyddio data gwyddonol i asesu risg a gwneud penderfyniadau ar sail gwybodaeth; defnyddio technolegau digidol yn ddiogel gan barchu pobl eraill.

(healthy, confident individuals) learning to make use of scientific data to assess risk and take informed decisions; using digital technologies safely and with respect for others.

Fframwaith sgiliau 3 -19 Skills Framework 3 - 19

Datblygu sgiliau:
Meddwl,
Cyfathrebu,
TGCh
Rhif

Developing:
Thinking,
Communication,
ICT
Number

Datblygu sgiliau a
gyflwynir yn y Cyfnod
Sylfaen.
Adeiladu ar y sgiliau
yma trwy dasgau unigol
neu grŵp.

Develop skills introduced
in Foundation Phase.
Build on these skills with
individual or group tasks.

Cyfnod Allweddol 2 / Key Stage 2

Yng Nghyfnod Allweddol 2, dylid rhoi cyfleoedd i'r dysgwyr adeiladu ar y profiadau a gawsant yn ystod y Cyfnod Sylfaen. Dylid eu haddysgu i ddylunio a gwneud cynhyrchion syml trwy gyfuno'u sgiliau dylunio a gwneud a gwybodaeth a dealltwriaeth, a hynny mewn cyd-destunau sy'n cefnogi'u gwaith mewn pynciau eraill ac sy'n helpu i ddatblygu eu dealltwriaeth o'r byd gwneud.

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.

Cyfnod Allweddol 2 / Key Stage 2

Dylid sicrhau bod y dysgwyr yn ymwybodol o'r hyn y mae pobl wedi'i gyflawni a'u bod yn ymwybodol o'r syniadau mawr sydd wedi dylanwadu ar y byd. Dylid eu hannog i fod yn greadigol ac yn arloesol wrth ddylunio a gwneud, a dylid sicrhau ar yr un pryd eu bod yn ymwybodol o faterion sy'n ymwneud a chynaliadwydd a'r amgylchedd yn yr unfed ganrif ar hugain.

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.

Bwyd /
Food

Defnyddiau hyblyg ac anhyblyg /
Rigid and flexible materials

Ystod / Range

Systemau a rheoli /
Systems and Control

C.A.2. Sgiliau Gwneud / K.S.2 Skills Making

Iechyd a Diogelwch

Dylid addysgu'r disgyblion sut i ddefnyddio offer a chyfarpar yn ddiogel ac ystyried y peryglon a'r risgiau yn eu gweithgareddau, eu hymddygiad a'u ffordd o fyw. Dylent allu dilyn cyfarwyddiadau i reoli'r risg iddynt hwy eu hunain ac eraill, e.e. sicrhau bod mannau paratoi bwyd yn hollol lân; y risg sy'n gysylltiedig ag offer llaw.

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.

Systemau a rheoli / Systems and Control



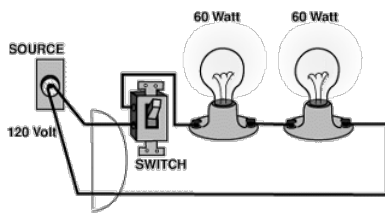
Rotary / Cylchdro
Oscillating / Osgiliadol
Reciprocating / Cilyddol
Linear / Llinol



Systemau a rheoli /
Systems and Control



Systemau a rheoli /
Systems and Control



Bwyd /
Food



Bwyd /
Food



Bwyd /
Food



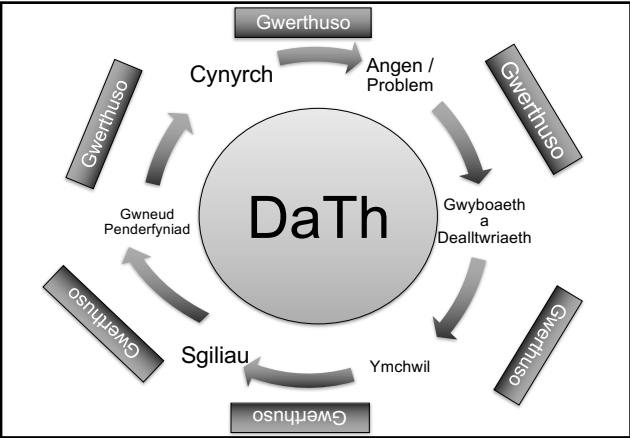
Defnyddiau hyblyg ac anhyblyg /
Rigid and flexible materials

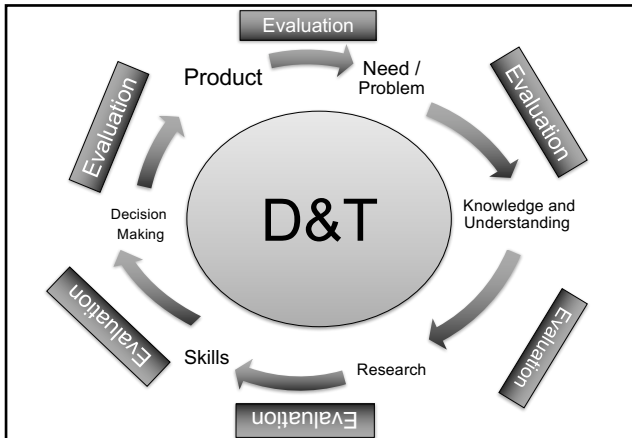
?

'More Welsh than Tom Jones' The new fashion brand made from traditional Welsh weaves



Patrymau “yn” y Ffabrig
Patterns “In” Fabric





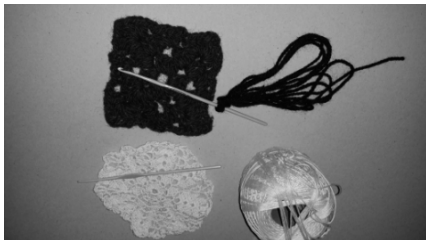
	Dylunio		Design
Gwerthuso	Gwybodaeth a Dealltwriaeth - Eich taith i'r felin	Evaluate	Knowledge and Understanding - The trip to the mill
	Ymchwil		Research
	Sgiliau - Y sgiliau rydyn yn cyflwyno yn y sesiwn heddiw		Skills - The skills we will be presenting to you today

	Dylunio		Design
	O Ganlyniad eich ymchwil flaenorol: - targedu angen - ystyried allbwn i ymateb i'r angen.		As a result of your initial investigation: - target a need - Consider an output that responds to the need.





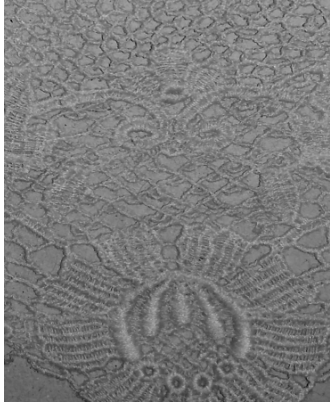
**Gwaith
Crosio
Crochet**



you tube

Les

Lace



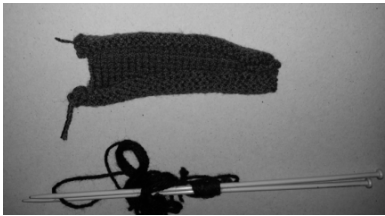
Ffelt

Felt



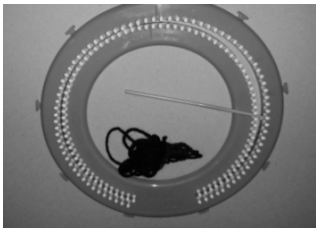
Gwau

Knitting



youtube

**Gwau
Knitting**



**Gwau
Knitting**

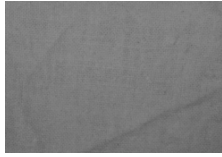


**Gwehyddu
Weaving**

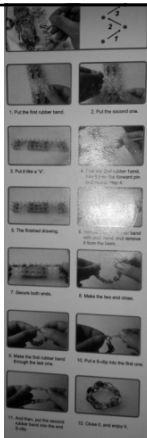


Youtube - Basic
Youtube - Rya
Youtube - Blocks

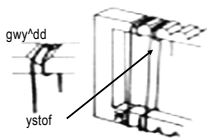
Gwehyddu Weaving



Gwehyddu Weaving

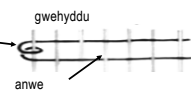


1. Mae'r ystof yn rhedeg o'r top i'r gwaelod. Bydd yr ystof gorffenedig a rhesi ar y ddwy ochr.



1. Warp threads run from top to bottom. The completed warp will have rows of yarn on both sides of the loom.

2. Gwehyddwch o ochr i ochr. Cymerwch ofal beidio tynnu'r edau'n rhy dyn - bydd hwn yn achosi'r ochrau dynnu mewn.



2. Weave from side to side taking care not to pull the weft threads too tight – this will pull in the edges.

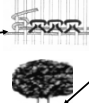
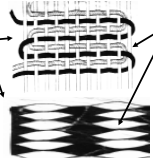
Bydd creu tonnau yn atal y broblem. Dechreuwch gyda phedair rhes o wehyddu plain gan wthio'r rhes lawr ar ddiwedd pob rhes. I uno'r edau croeswch tri neu bedwar edau ystaf Rhaid gwnio'r edrydd rhydd ar y diwedd.

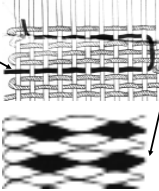
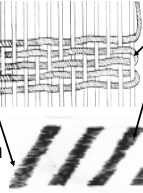


Waving the weft will prevent this. Start with a piece of wool approximately the length you will need. To join yarns overlap by three to four warp threads. Loose thread at the back sew in at the end.

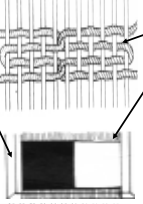
Patrymau gwehyddu

1. **Gwehyddiad Plaen.** Y ffurf symlaf o wehyddu. Tebyg i greithio

1. Plain Weave
Simplest of weaves. Like darning.
2. **Rya** Yn rhoi peil blewog

2. Rya Gives a long shaggy pile
3. **Pick and Pick** Yn seiliedig ar wehyddiad plaen yn defnyddio gwahanol liw bob yn ail

3. Pick and Pick
Based on plain weave but uses alternating colours

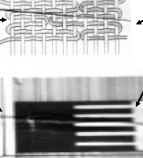
4. **Smotiau** Seiliedig ar wehyddiad plaen. Defnyddiwrch unrhyw rif o liw plaen i liw tywyllach

4. Spots Based on plain weave. Use any number of plain rows to one of a darker colour
5. **Twil** Dros ddwy edau, dan ddwy edau. Ar y rhes nesaf dechreuwch un edau i'r dde - gyda dros ddwy dan ddwy.

5. Twills Over two threads, Under two threads. Next row start one thread to the right with over tow under two.

6. Uniad syth.
Gweithio dau liw gyda'i gilydd o ochrau gyferbyn, bachwch o amgylch pob un



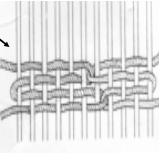
6. Straight Join Work two colours together from opposite sides and hook around each other

7. Cyfarfod a Gwahanu.
Croesi lliwiau gydag unrhyw rif chi isio.



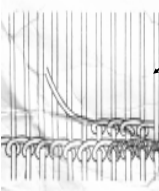
7. Meet and Separate Overlap colours by any number you want

8. Uniad goledd.
Gweithio gyda dau liw bachwch o amgylch pob symudiad pob rhes i'r ochr.



8. Sloping Join Working in two colours when they hook around each other move each row sideways.

9. Soumak Defnyddir i wneud rygiau



9. Soumak Used to make carpets

Gorffennu ymaith

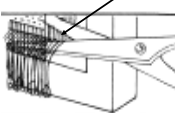
1. Gorffennwch wehyddu gyda phedwar rhes o wehyddiad plaen

Finishing off the work

1. Finish weaving with four rows of plain weaving

2. Torrwch y gwehyddiad drwy dorri'r edau ystof ar yr ochr arall o'r ffrâm

3. Gwniwch yr edeifion rhydd



2. Cut the weave through the yarn on the side of the frame.

3. Sew the loose yarns

4. I atal y brethyn sy' wedi'i wehyddu rhaflo, clymwch neu plethwch y terfynau



4. To prevent the weave from fraying knot or plait the endings

Gwneud		Making	
Gwerthuso	Penderfynu Wrth sail y broses dylunio a'ch gwerthusiad dewch i gasgliad	Evaluate	Decision making Based on the design process and the evaluations come to a conclusion
	Sgiliau - Gwneud defnydd o'r sgiliau mae'r plant wedi'u dysgu yn y sesiwn i ddatblygu'r allbwn		Skills - Make use of the skills the children have learned in the initial skills session to develop the output.

***Rhaid gwneud:-**

1. Beth allwch wneud gyda'ch cynnyrch gorffenedig?
2. Ail adroddwch sut gwnaethoch gyflawni'ch gwehyddu.
3. Gwerthuswch y Broses
4. Gwerthuswch y Cynnydd (*disgyblion*)
5. Adolygwch a sut allwch ei wella?

***Must Do**

1. What can you do with the finished product?
2. Recount – How the woven product was made.
3. Evaluate the process.
4. Evaluate the progress. (*pupils*)
5. Review and how can you improve?

Cwestiynau

Yr allbwn?
Beth allwn wneud gyda'r cynnyrch terfynol?
Beth am y Cyfnod Sylfaen?
Oes modd symleiddio'r dasg a'r offer ar gyfer yr oedran yma?

Questions

The output?
What can we do with the final product?
What about the Foundation Phase?
Is there a way we could simplify the task and the resources for this age range?

Patrymau “Ar” y Ffabrig**Patterns “On” Fabric**

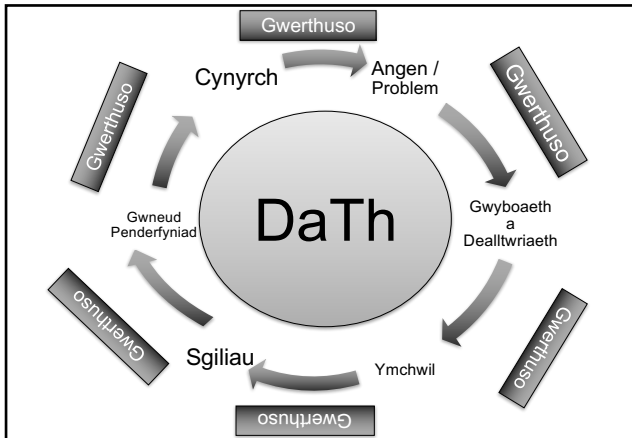
Argraffu Printing

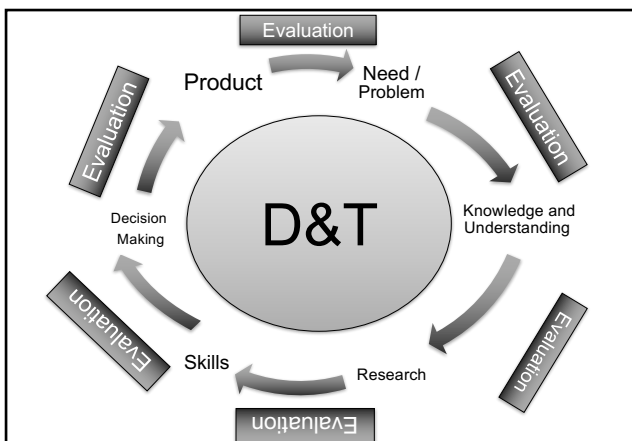
Patrymau ar wyneb:
 printio bloc,
 printio sgrin,
 patrymau stensil,
 brws,
 creon a.y.b.
 Argraffu o'r cyfrifiadur

On-Surface Patterns:
 block printing,
 screen printing,
 Batik
 painted on patterns,
 Print by stencil and brush etc
 Crayon
 Print by computer

Arbrofi 2 wahanol fath o
 printio ar wyneb fabrig:
 Creon fabrig
 Printio o'r cyfrifiadur

Try 2 different forms of
 printing on surface patterns
 onto fabric:
 Fabric crayons
 Printing from the computer





Dylunio		Design	
Gwerthuso	Gwybodaeth a Dealltwriaeth	Evaluate	Knowledge and Understanding
	- Eich taith i'r felin		- The trip to the mill
	- Ymchwil pellach i mewn i patrymau ar wyneb fabrig		- Further research into patterns on fabric
	Sgiliau		Skills
	- Y sgiliau rydyn yn cyflwyno yn y sesiwn heddiw		- The skills we will be presenting to you today

Dylunio

O Ganlyniad eich ymchwil flaenorol:

- targedu angen
- ystyried allbwn i ymateb i'r angen.

Design

As a result of your initial investigation:

- target a need
- Consider an output that responds to the need.

Argraffu yn defnyddio ffotograffau digidol

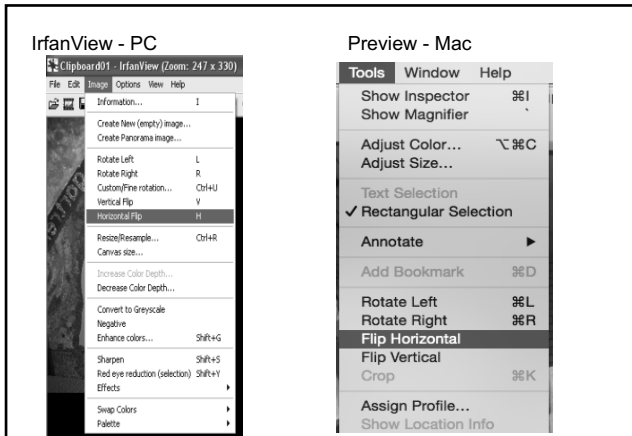
Bydd eisiau cyfarpar digidol i dynnu lluniau, cys t cotwm, rhaglen ddigidol i drawsffurfio/fflip llun (Irfan View, Preview) papur argraffu arbennig, argraffwr inc jet, cys T, haearn smwddio

Printing – Using digital Photographs

You will need a digital device to take a photograph, Tee shirt, Computer programme e.g. IrfanView (free download)/Preview, printer paper for photograph transmission to Tee shirt, an iron

1. Yn defnyddio offer symudol: creu llun.
2. Trosglwyddwch y llun i'r gliniadur.
3. Defnyddiwch raglen wnaiff fflip lorweddol. Argraffwch y llun gan ddefnyddio argraffwr inc jet a defnyddio'r papur i'w drosglwyddo i ffabrig.
4. Defnyddiwch yr haearn smwddio i drosglwyddo'ch llun i ddefnydd cotwm.

1. Using a mobile device create a picture
2. Transfer the image to a laptop.
3. Use a programme that will horizontally flip your photograph. Print using Ink jet printer, paper for fabric transfer.
4. Iron your design onto a cotton material.



***Iechyd a Diogelwch**
Dan orchwyl.

1. Rhaid i'r haearn smwddio fod yn unionsyth yn wynebu bant o fannau cerdded. Sicrhewch y fflecs gyda thap. 2. Un yn smwddio wyneb i waered ar eich cotwm. Llun wedi'i drosglwyddo. 3. Diffodd yr haearn smwddio ar ôl ei ddefnyddio a'i adael i oeri'n ddiogel.

***Health and Safety**
Must be supervised

1. Iron must always be upright facing away from walking areas. Make sure the flex is safely taped. 2. Only one in control of the iron at any given time. 3. Iron onto the reverse side of print out. Image transferred onto Tee shirt. 4. Iron must be switched off after use and left to cool in a safe area.

Creonau Ffabrig, papur catris, haearn smwddio, defnydd cotwm

1. Yn defnyddio creonau ffabrig gwnewch floc printio (ar bapur catris)

2. Smwddiwch gyferbyn ar y cotwm

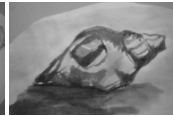
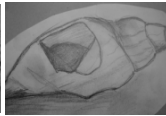
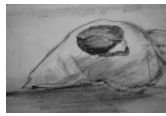
Fabric Crayons, cartridge paper, iron, cotton material

1. Using fabric Crayons make a printing block (on cartridge paper).

2. Iron onto cotton

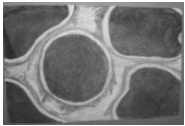
Syniadau i'w defnyddio gyda
chreonau argraffu.

Ideas that can be used with fabric
crayons.

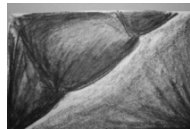


Dyluniad arsylwad gwreiddiol yn defnyddio pensiliau
toddadwy mewn dŵr, inc, brws dyfrlliw

Initial observational drawings using water soluble
pencils, pencils and ink



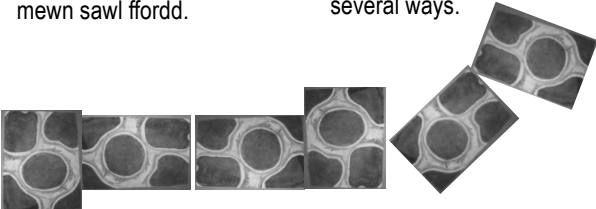
Enghreifftiau yn
barod i'w brintio. Y
bloc argraffu terfynol
wedi'i wneud gan
greonau ffabrig i'w
drosglwyddo i'r
ffabrig

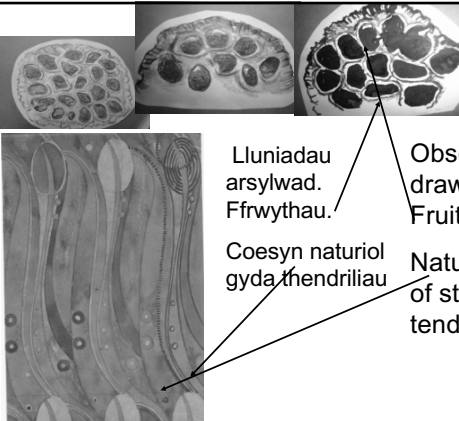


The final printing
blocks using fabric
crayons to transfer
the pattern from the
block on to the
fabric.

Dylai drafodaeth ddatblygu lle mae'r disgyblion yn cael eu hannog i feddwl am linell, gwagle a gweoedd yn arwain i ddadansoddiad gofodol ac ail greu delwedd mewn sawl ffordd.

A discourse should develop whereby pupils are encouraged to think of line, space and texture leading to spatial qualities and repeating the image in several ways.





Lluniadau arsylwad. Ffrwythau.

Observational drawings. Fruits.

Coesyn naturiol gyda thendriliau

Natural forms of stems and tendrils

Delweddau a dyluniadau tecstilau Art Nouveau

Mae dylunwyr enwog e.e. C.R. Mackintosh a William Morris yn rhoi ystod eang o enghreifftiau o batrymau ar wyneb y ffabrig.

Art Nouveau Images & Textile Designs

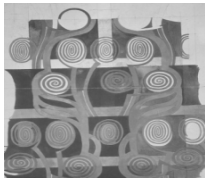
Famous designers e.g. C.R. Mackintosh William Morris gives wide range of materials for making on-surface marks.



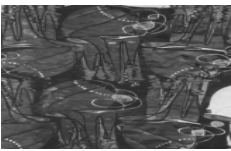
Rose & teardrop
C.R. Mackintosh



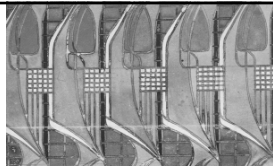
C.R. Mackintosh



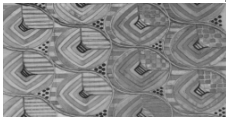
Pencil a
dyfrlliw
Pencil &
watercolour



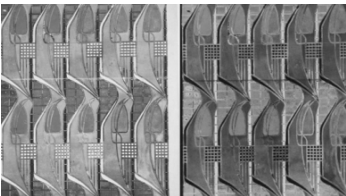
Wedi'i steilio ar ffurf
planhigyn Stylised
plant form



Tiwlip a latis
Tulip and lattice

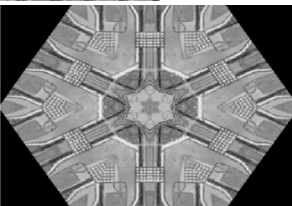
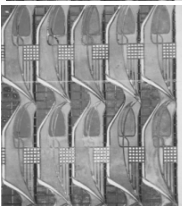


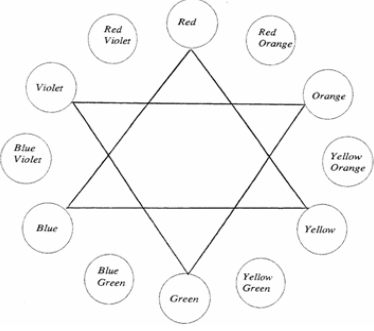
Cylchau, llinellau, siec a dotiau. Circles, lines,
checks and dots



Y ddelwedd wedi'i
newid yn ddigidol

Image changed with
digital media



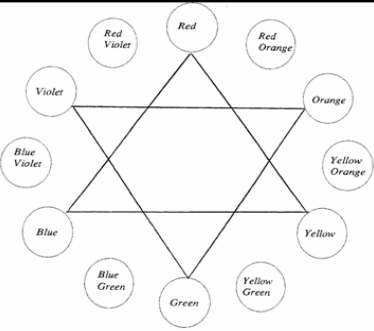


Arlliwiau Cynradd
Melyn, glas, coch

Primary Hues
Yellow, Blue, Red

Arlliwiau eilaidd
Gwyrdd, fioled,
oren

Secondary Hues
Green, Violet,
Orange



Arlliwiau canolradd

coch oren,
melyn oren,
melyn gwyrdd,
glas gwyrdd,
glas fioled,
coch fioled

Intermediate Hues

red orange, yellow
orange, yellow green,
blue green, blue violet, red
violet

Lliwiau cynnes Warm colours

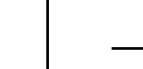
Lliwiau oer Cold colours




Lliwiau gwrthgyferbynnol Contrasting colours







Rhaid gwneud:- D.Th.

1. Ail adroddwch sut gwnaethoch gyflawni'ch argraffu.
2. Beth allwch wneud gyda'ch cynnyrch gorffenedig?
3. Gwerthuswch y Broses

Must do D.T.

1. Recount the process of 'How you made your printing
2. What could you do with your finished product.
3. Evaluate the Process
