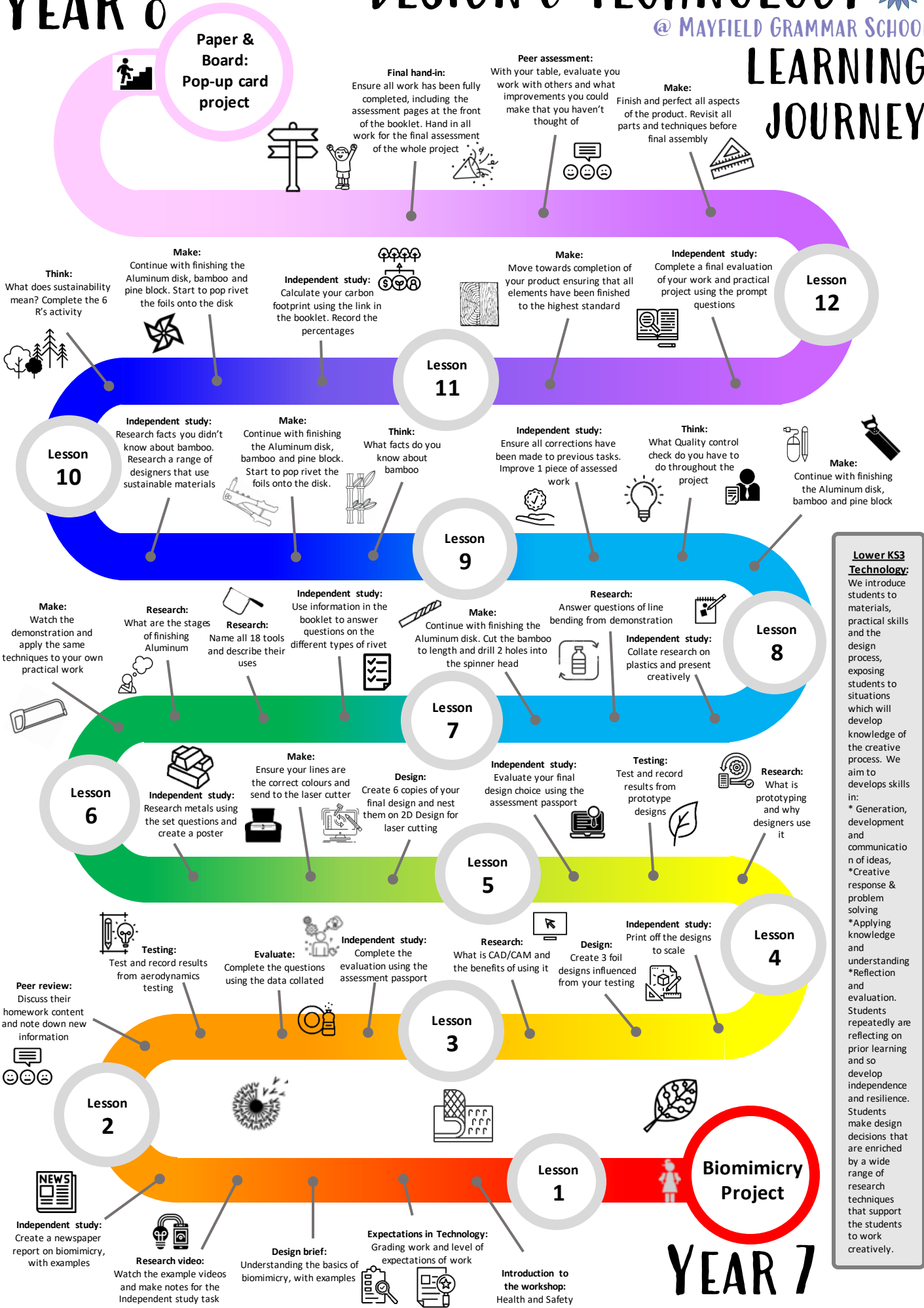


YEAR 8

DESIGN & TECHNOLOGY

@ MAYFIELD GRAMMAR SCHOOL

LEARNING JOURNEY



Paper & Board: Pop-up card project



Final hand-in:
Ensure all work has been fully completed, including the assessment pages at the front of the booklet. Hand in all work for the final assessment of the whole project

Peer assessment:
With your table, evaluate your work with others and what improvements you could make that you haven't thought of

Make:
Finish and perfect all aspects of the product. Revisit all parts and techniques before final assembly

Think:
What does sustainability mean? Complete the 6 R's activity

Make:
Continue with finishing the Aluminum disk, bamboo and pine block. Start to pop rivet the foils onto the disk

Independent study:
Calculate your carbon footprint using the link in the booklet. Record the percentages

Make:
Move towards completion of your product ensuring that all elements have been finished to the highest standard

Independent study:
Complete a final evaluation of your work and practical project using the prompt questions

Lesson 12

Lesson 10

Independent study:
Research facts you didn't know about bamboo. Research a range of designers that use sustainable materials

Make:
Continue with finishing the Aluminum disk, bamboo and pine block. Start to pop rivet the foils onto the disk.

Think:
What facts do you know about bamboo

Independent study:
Ensure all corrections have been made to previous tasks. Improve 1 piece of assessed work

Think:
What Quality control check do you have to do throughout the project

Make:
Continue with finishing the Aluminum disk, bamboo and pine block

Lesson 11

Lesson 9

Research:
What are the stages of finishing Aluminum

Research:
Name all 18 tools and describe their uses

Independent study:
Use information in the booklet to answer questions on the different types of rivet

Make:
Continue with finishing the Aluminum disk. Cut the bamboo to length and drill 2 holes into the spinner head

Research:
Answer questions of line bending from demonstration

Independent study:
Collate research on plastics and present creatively

Lesson 8

Make:
Watch the demonstration and apply the same techniques to your own practical work

Independent study:
Research metals using the set questions and create a poster

Make:
Ensure your lines are the correct colours and send to the laser cutter

Design:
Create 6 copies of your final design and nest them on 2D Design for laser cutting

Independent study:
Evaluate your final design choice using the assessment passport

Testing:
Test and record results from prototype designs

Research:
What is prototyping and why designers use it

Lesson 7

Lesson 5

Testing:
Test and record results from aerodynamics testing

Evaluate:
Complete the questions using the data collated

Independent study:
Complete the evaluation using the assessment passport

Research:
What is CAD/CAM and the benefits of using it

Design:
Create 3 foil designs influenced from your testing

Independent study:
Print off the designs to scale

Lesson 4

Peer review:
Discuss their homework content and note down new information

Lesson 2

Independent study:
Create a newspaper report on biomimicry, with examples

Research video:
Watch the example videos and make notes for the Independent study task

Design brief:
Understanding the basics of biomimicry, with examples

Expectations in Technology:
Grading work and level of expectations of work

Introduction to the workshop:
Health and Safety

Lesson 1

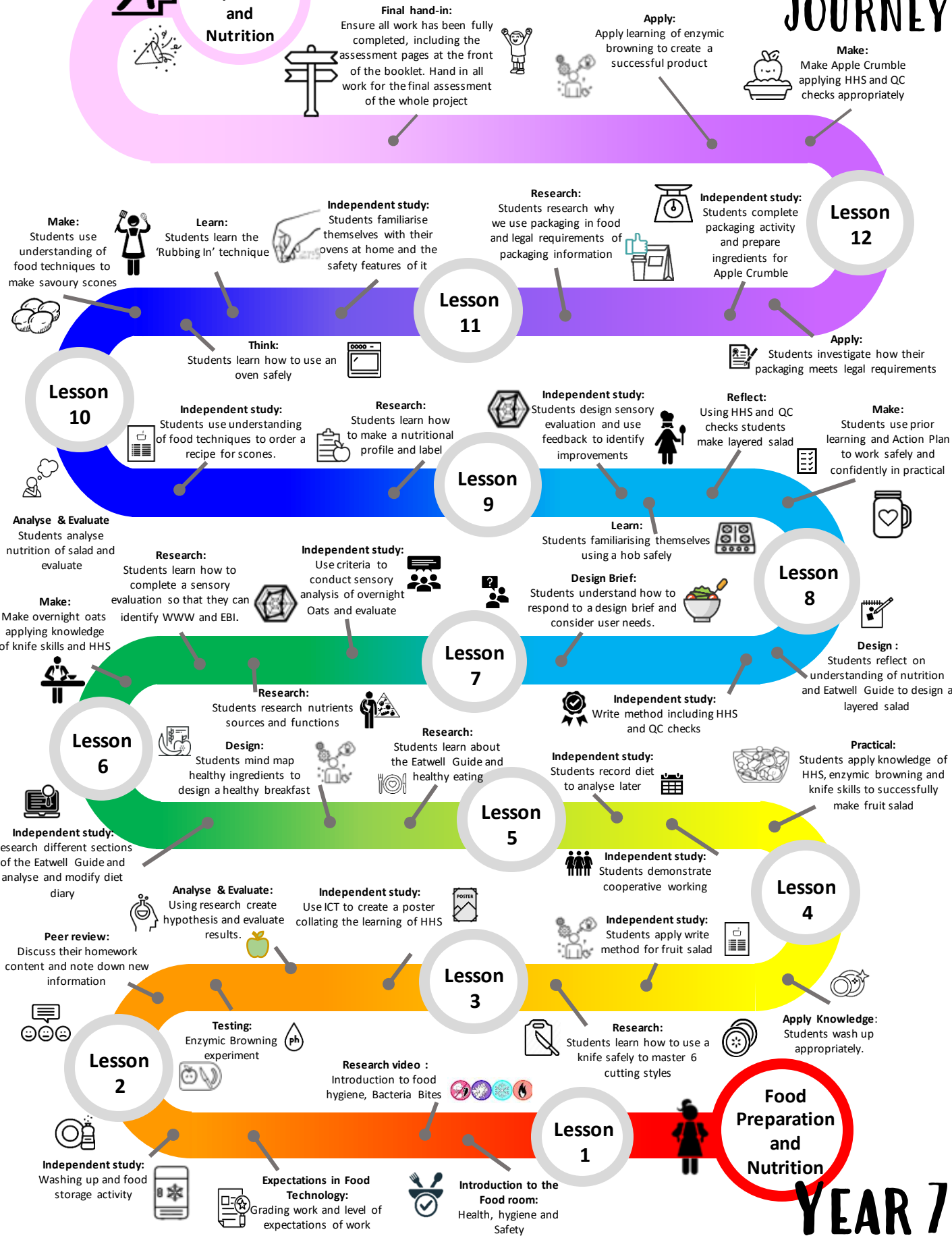
Biomimicry Project

YEAR 7

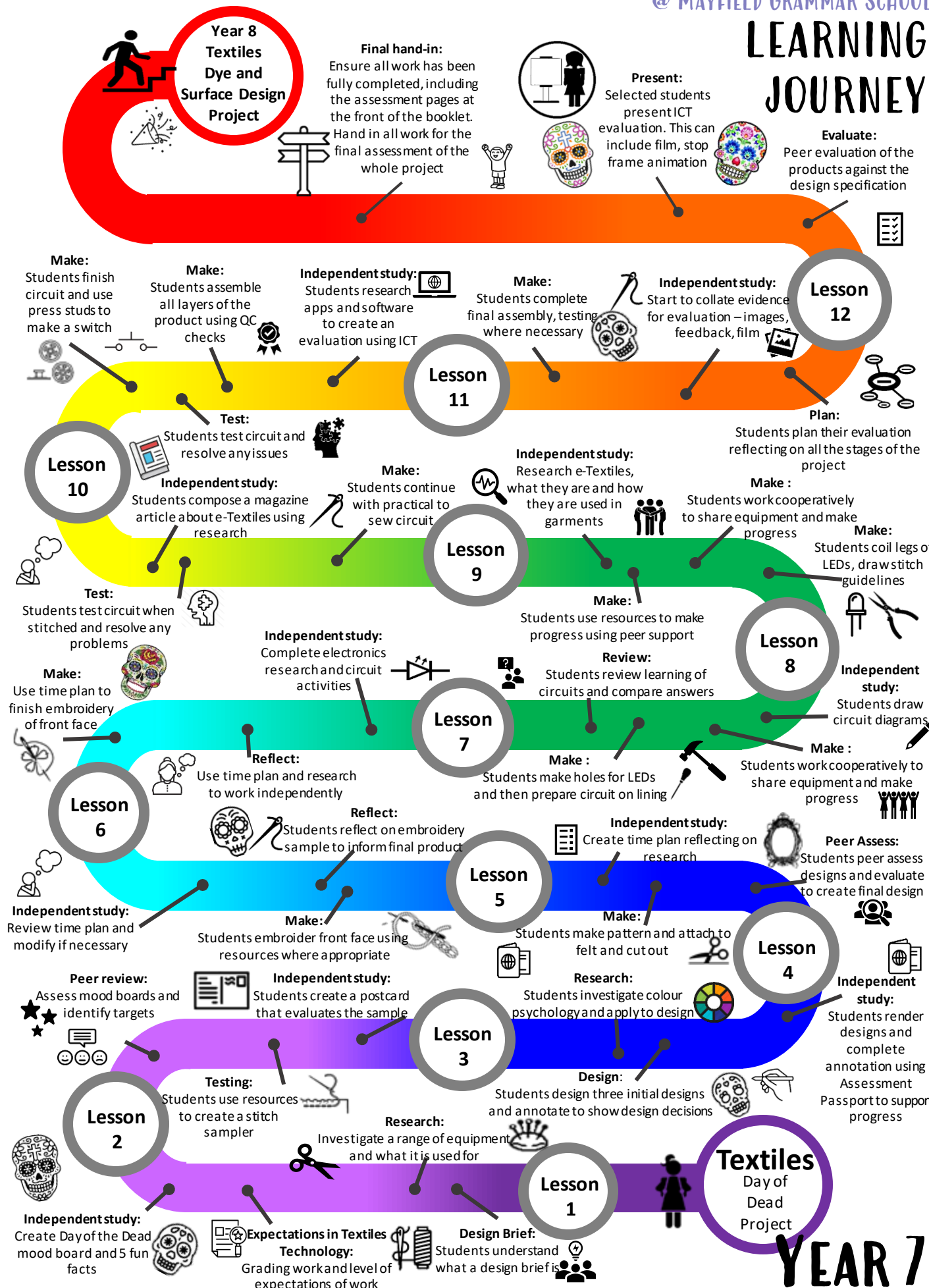
Lower KS3 Technology:
We introduce students to materials, practical skills and the design process, exposing students to situations which will develop knowledge of the creative process. We aim to develop skills in:
* Generation, development and communication of ideas,
* Creative response & problem solving
* Applying knowledge and understanding
* Reflection and evaluation.
Students repeatedly are reflecting on prior learning and so develop independence and resilience. Students make design decisions that are enriched by a wide range of research techniques that support the students to work creatively.

LEARNING JOURNEY

Year 8 Food Preparation and Nutrition



LEARNING JOURNEY



YEAR 9

DESIGN & TECHNOLOGY

@ MAYFIELD GRAMMAR SCHOOL

LEARNING JOURNEY



Year 9
'Telling Stories'
Weaving Project



Final hand-in:
Ensure all work has been fully completed, including the assessment pages at the front of the booklet. Hand in all work for the final assessment of the whole project



Present:
Students to present A3 board and final apron to showcase work. Peer assessment and critique.



Make:
Extension tasks-embellishments



Reflect:
Evaluate product refer to users needs



Independent study:
Prepare for presentation using guidelines in booklet.- A3 board

Lesson 12

Lesson 10

Evaluation:
Answer set questions and write a full evaluation. Refer to brief.



Make:
Finish construction



Make:
embellishment



Make: Care label reflecting on properties of fabrics



Plan:
Students plan their evaluation reflecting on all the stages of the project



Lesson 11

Reflect:
Sewing machine Parts Test



Make: Construct all layers-attach to zipper



Lesson 9

Knowledge:
Sewing Symbols research



Test: Carry out QC checks on practical as work progresses

Knowledge: Watch video tutorial and answer questions to ensure understanding



Make: Begin embellishment



Lesson 8

Reflect: QC checks to ensure a high level product



Make: Sew in zipper

Independent study:
Safety in the workroom



Lesson 7

Make: Prepare fabric for final product



Reflect: QC checks to ensure a high quality product



Make: Construct outer of bag using instructions

Lesson 6

Reflect: Written evaluation of own performance



Test: Trial the surface techniques to master



Test: Trial the surface techniques to master



Knowledge:
Learning how to use the sewing machine



Lesson 5

Make: Create sewing machine stitching sample



Knowledge: Learn the parts of a sewing machine



Lesson 4

Make:
Block printing sample inspired by natural form drawing



Independent study:
Research three different Tie Dye Techniques



Make:
Procion Dye and Tie Dye testing



Make:
Collage inspired by Hannah Klaus Hunter



Lesson 3

Independent study/Review:
Review natural forms drawing for inspiration



Research:
Artist Research and Critical Analysis- Maxine Sutton

Research:
Research and Critical Analysis- Hannah Klaus Hunter



Lesson 2

Independent study:
Natural Forms- Drawing



Expectations in Textiles Technology:
Grading work and level of expectations of work



Design Brief:
Students understand what a design brief is

Lesson 1



Textiles
Year 8
Dye and Surface Design Project

YEAR 8



**Year 9
Food
GCSE
Skills**

Final hand-in:
Ensure all work has been fully completed, including the assessment pages at the front of the booklet. Hand in all work for the final assessment of the whole project

Apply:
Apply learning of enzymic browning to create a successful product

Make:
Make Apple Rose tarts

Lesson 12

Independent study:
Students complete flyer for dietary requirements

Make:
Students watch demo and make ruff puff pastry

Independent study:
Students create an instruction sheet for the techniques they used

Apply:
Students apply a finishing technique researched

Make:
Students use understanding of food techniques to a complex shape roll

Research:
Flipped learning- students research techniques for practical lesson

Lesson 11

Independent study:
Research dietary requirements

Research:
Students collaborate research to create a flyer about selected dietary requirement

Think:
Students reflect on how to use an oven safely

Lesson 10

Make:
Students make a flyer to educate about the dietary requirement

Reflect:
Using HHS and QC checks

Make:
Students use prior learning to make pizza

Lesson 9

Apply:
Students revisit oven safety and use

Independent study:
Use criteria to conduct sensory analysis of pasta pot and evaluate

Independent study:
Students research bread making, glazes and toppings.

Lesson 8

Research:
Students investigate the conditions for yeast to work.

Make:
Make final design working independently to apply HHS and QC controls

Independent study:
Design two pizzas that use seasonal ingredients

Lesson 7

Research:
Write a hypothesis and record results. Write a conclusion

Research:
Students learn seasonality and the environmental and economic impact of food choices

Design:
Students use research to design a seasonal calendar of food

Lesson 6

Independent study:
Students record diet and record the source of their food on world map

Make:
Students apply knowledge of pasta making and make own pasta and dry

Lesson 5

Independent study:
Research the process of making and shaping pasta

Independent study:
Design two initial ideas reflect on year 7 learning

Analyse & Evaluate:
Use sensory testing of sauces to make design decision.

Lesson 4

Apply knowledge:
Create comic strip to show process of gelatinisation.

Assess:
Students peer assess designs and give feedback to inform progress

Research:
Watch video to understand gelatinisation.

Lesson 3

Revision Quiz:
What can you remember from Year 7?

Sensory Testing:
Different ways to make white sauce

Design Brief:
Planning research

Lesson 2

Food Preparation and Nutrition

Lesson 1

Recap of the Food room:
Revisit expectations of HHS

Expectations in Food Technology:
Grading work and level of expectations of work

Independent study:
Conduct research that will help design effectively to meet users needs

YEAR 9

DESIGN & TECHNOLOGY

@ MAYFIELD GRAMMAR SCHOOL

LEARNING JOURNEY

Copper USB light

Final hand-in:
Ensure all work has been fully completed, including the assessment pages at the front of the booklet. Hand in all work for the final assessment of the whole project

Evaluation:
Complete an evaluation against the specification and brief ensuring each point has been successfully met, if not, justify

Make:
Finish and perfect all aspects of the card, ensure all the 3D and moving aspects are working

Make:
Start to create the basis of the card using the final design and plans

Independent study:
Research the difference between QA and QC. Write examples for each that will be completed whilst making



Make:
Continue to complete the final product, ensuring that a high quality is being maintained throughout

Independent study:
Design an accompanying item to sell with your card design

Lesson 12

Lesson 11

Lesson 10

Independent study:
Write a manufacturing plan for the card with timings for each step

Design:
Using 2D Design, create any imagery needed for the card and print

Plan:
What materials, levers/linkages/motions, split pins, images are needed

Independent study:
Finish final design with full annotation using the feedback

Design:
Create a final design which improves on the initial designs from the feedback

Evaluate:
Depict what feedback is useful and constructive as to utilise it to improve design work

Feedback:
Peer assess others 3 designs giving positive and instructive feedback

Lesson 9

Make:
Create worded step pop-up & kirigami card examples

Evaluate:
Write a short evaluation on each card for how it could be utilised and how well it is completed

Independent study:
Complete a full specification using AMUSE MEE FC and prior learning

Research:
Research the 3 greetings chosen including: images, prices, target market, peak purchase time

Design:
Choose a final greeting and design 3 cards using research and prior learning

Independent study:
Finish the 3 initial designs and fully annotate them

Lesson 8

Lesson 7

Lesson 6

Independent study:
Create the origami shapes using visual instructions

Evaluate:
Write a short evaluation on each card for how it could be utilised and how well it is completed

Make:
Create rotary, lever and linkage card examples

Independent study:
Research Robert Sabuda and Giles Miller's work

Make:
Create step and V fold card examples & evaluate

Analyse:
In pairs, analyse 3 products in detail using AMUSE MEE FC

Evaluate:
What is AMUSE MEE FC and how is it used in analysis

Lesson 5

Research:
Link scales of production with products produced this way

Watch:
Understand how lithography works, make a print and safely use a craft knife

Independent study:
Create a poster on the 3 types of woods

Design brief:
Understand ways that a card can be mechanical

Discover:
Match the motions and linkages to their Mechanisms

Independent study:
Create a mind map of types of greetings cards & evaluate 3 to develop

Lesson 4

Lesson 3

Trees & Wood:
Understand the 3 types of woods and where they come from and how they make paper

Lesson 2

Independent study:
Label the images with their material name



Modelling:
Understand the importance of modelling and produce a physical model using researched materials

Investigation:
Look at a range of materials and their properties



Expectations in Technology:
Grading work and level of expectations of work



Lesson 1

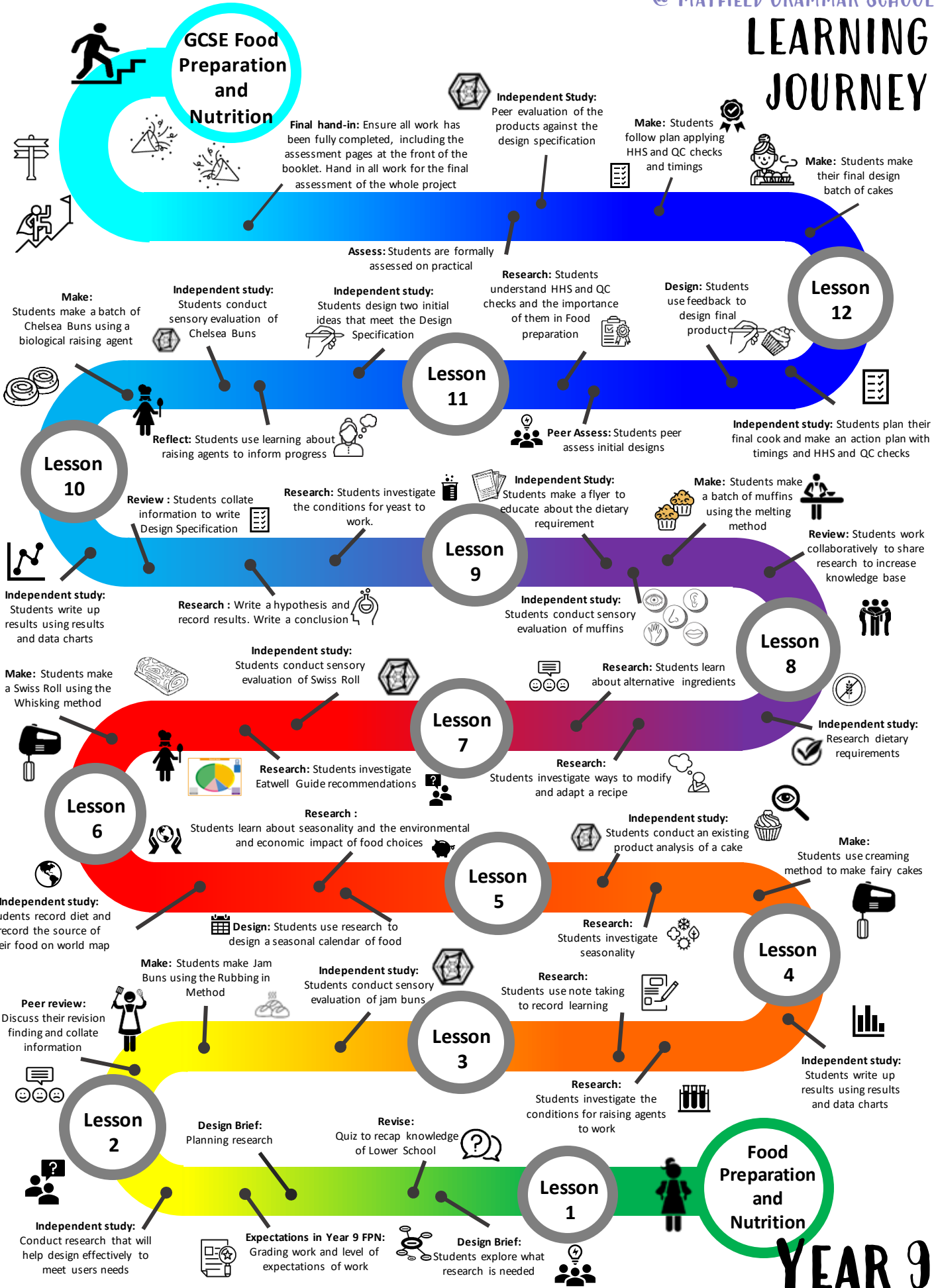
**Paper & Board:
Pop-up card project**

YEAR 8

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- * Reflection and evaluation. Students repeatedly are reflecting on prior learning and so develop independence and resilience. Students make design decisions that are enriched by a wide range of research techniques that support the students to work creatively.



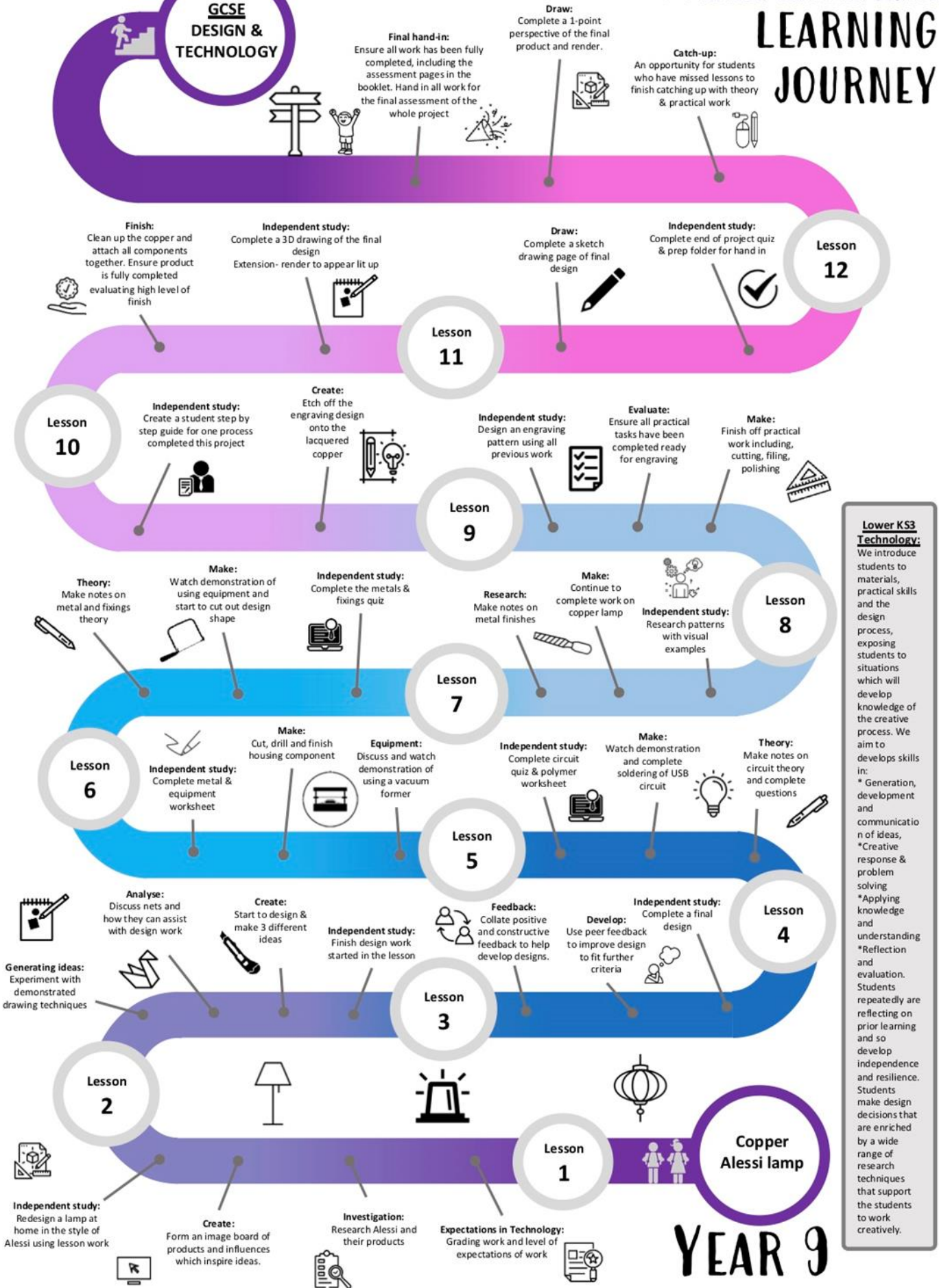
YEAR 10

DESIGN & TECHNOLOGY

@ MAYFIELD GRAMMAR SCHOOL

LEARNING JOURNEY

GCSE DESIGN & TECHNOLOGY



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YEAR 9