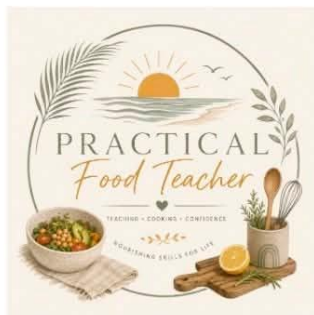




YEAR 9 FOOD TECHNOLOGY

TERM 4 | MISS REHNER

MASTER CHEF|MYSTERY BOX

8-WEEK UNIT

DURATION	LESSONS	PRACTICAL COOKS	YEAR
8 weeks	2 per week	3	9

Unit driving question

Can you use your food knowledge, creativity and practical skills to turn a mystery selection of ingredients into a successful food product?

1. Unit overview

Students undertake a series of increasingly challenging Mystery Box food challenges.

Rather than following recipes, students investigate ingredients, consider nutritional and sensory properties, develop ideas, plan production, safely produce food and evaluate the outcome.

CHALLENGE 1	CHALLENGE 2	CHALLENGE 3
LEARN	ADAPT	CREATE
Students work with an accessible mystery box and develop their understanding of planning and recipe development.	Students receive a more challenging combination of ingredients and must modify their ideas in response to constraints.	Students complete an independent Grand Final Mystery Box Challenge, showing the knowledge and skills developed throughout the unit.

2. Design brief

Student Design Brief

You have been selected to compete in the Year 9 Mystery Box Challenge. Your task is to design, produce and evaluate an appealing food product using ingredients provided in a mystery box.

Your food product must:

- use a minimum number of mystery-box ingredients
- be suitable for your identified target consumer
- demonstrate food preparation and cooking techniques
- be produced safely and hygienically
- demonstrate consideration of nutrition, sensory properties and sustainability
- be achievable within the available time and resources
- be evaluated and improved using feedback and testing

Your final product should demonstrate that you can make informed food technology decisions rather than simply follow a recipe.

3. Assessment overview

Students compile a design portfolio across the unit and apply their learning during three practical Mystery Box challenges. Assessment evidence should show both the design process and the quality of decision-making, not only the finished product.

Week	Lesson 1	Lesson 2	Key portfolio milestone
1	Entering the Mystery Box	Ingredient Detectives	Brief, criteria, constraints and ingredient profiles
2	From Ingredients to Ideas	Selecting and Planning	Challenge 1 concepts and approved production plan
3	Challenge 1: Learn	Evaluate, Learn, and Improve	Practical evidence and evaluation
4	Understanding Constraints	Ideation and Recipe Adaptation	Constraint map and adapted concepts
5	Planning Challenge 2	Challenge 2: Adapt	Approved plan and practical evidence
6	Comparing Evidence	Grand Final Launch	Growth goal and final design opportunity
7	Final Concept Development	Final Decision and Plan	Final concepts and approved production plan
8	Grand Final: Create	Evaluation and Showcase	Final product, evaluation and curated portfolio

WEEKLY FOCUS | Launch the design challenge and build ingredient knowledge.

LESSON 1 | ENTERING THE MYSTERY BOX

Learning intention: We are learning to unpack a design challenge and identify the needs, opportunities, criteria and constraints that guide a successful food product.

Success criteria:

- I can explain the unit driving question in my own words.
- I can distinguish between a criterion and a constraint.
- I can create initial criteria for a successful Mystery Box product.

Suggested lesson sequence

ENGAGE | Reveal a sealed sample mystery box and invite students to predict possible products without opening it.

EXPLORE | Unpack the design brief, target consumer, minimum ingredient expectations, time, equipment and safety constraints.

EXPLAIN | Model the difference between a need, opportunity, criterion and constraint using a familiar food product.

APPLY | Students create a first draft of design criteria and a “What I know / need to know” chart.

REFLECT | Exit ticket: identify one decision a food technologist makes that a recipe follower may not.

PORTFOLIO EVIDENCE

Annotated design brief; first-draft criteria and constraints; prior-knowledge chart.

RESOURCES

Sample mystery box, unit brief, portfolio template, sticky notes.

CHECK FOR LEARNING

Review whether criteria are specific, measurable, and related to the brief.

LESSON 2 | INGREDIENT DETECTIVES

Learning intention: We are learning to investigate ingredients by analysing function, nutrition, sensory properties, seasonality, and storage requirements.

Success criteria:

- I can describe the function of selected ingredients.
- I can identify relevant nutritional and sensory properties.
- I can record accurate research that can inform product ideas.

Suggested lesson sequence

ENGAGE | Display several contrasting ingredients and ask: “What can this ingredient do in a food product?”

EXPLORE | In teams, rotate through ingredient investigation stations covering function, flavour, texture, nutrition, storage, and sustainability.

EXPLAIN | Model the difference between naming a property and explaining how that property affects a design decision.

APPLY | Students complete ingredient profile cards and build a class ingredient-function bank.

REFLECT | Students nominate the most versatile ingredient and justify the choice with two properties.

PORTFOLIO EVIDENCE

Ingredient profile cards; class function bank; justified versatile-ingredient response.

RESOURCES

Ingredient samples or images, labels, nutrition panels, research devices.

CHECK FOR LEARNING

Question students on how ingredient properties could alter technique or product form.

WEEK 2

Lessons 3 and 4 • Mystery Box: The Challenge

WEEKLY FOCUS | **Generate**, select and plan a possible first product.

LESSON 3 | FROM INGREDIENTS TO IDEAS

Learning intention: We are learning to generate a range of food product ideas from a limited set of ingredients.

Success criteria:

- I can generate at least three different ideas.
- I can show how each idea uses the mystery-box ingredients.
- I can avoid selecting my first idea without comparison.

Suggested lesson sequence

ENGAGE | Complete a rapid “ten uses for one ingredient” creativity warm-up.

EXPLORE | Reveal the Challenge 1 practice box. Students brainstorm product categories, flavour directions and suitable techniques.

EXPLAIN | Model SCAMPER prompts and annotated food concept sketches.

APPLY | Students generate three concepts, label mystery ingredients and note techniques, equipment and presentation.

REFLECT | Peer gallery walk: collect one question and one suggestion for each concept set.

PORTFOLIO EVIDENCE

Three annotated concepts; peer questions and suggestions.

RESOURCES

Challenge 1 ingredient list, SCAMPER prompts, concept-planning sheet.

CHECK FOR LEARNING

Check variety, feasibility, and genuine use of mystery-box ingredients.

LESSON 4 | SELECTING AND PLANNING A FEASIBLE PRODUCT

Learning intention: We are learning to compare ideas, justify a preferred concept, and plan safe production for Challenge 1.

Success criteria:

- I can use a decision matrix to compare ideas.
- I can justify my selected concept using the design criteria.
- I can prepare a logical recipe, workflow and safety plan.

Suggested lesson sequence

ENGAGE | Compare two sample ideas and identify why the more exciting idea may not be the most feasible.

EXPLORE | Students weight and apply criteria in a decision matrix.

EXPLAIN | Model recipe adaptation, accurate sequencing, mise en place, time management and hazard control.

APPLY | Students finalise recipe, equipment list, workflow, plating sketch and safety checks.

REFLECT | Teacher checkpoint conference before practical approval.

PORTFOLIO EVIDENCE

Decision matrix; justified concept; recipe; workflow; safety and hygiene plan.

RESOURCES

Decision matrix, recipe template, equipment list, production-plan template.

CHECK FOR LEARNING

Approve only plans that fit time, equipment, ingredient and safety constraints.

WEEK 3

Lessons 5 and 6 • Mystery Box: The Challenge

WEEKLY FOCUS | **Produce** and evaluate Challenge 1: Learn.

LESSON 5 | CHALLENGE 1: LEARN • PRACTICAL COOK

Learning intention: We are learning to follow a self-developed production plan and safely produce an appealing food product from mystery-box ingredients.

Success criteria:

- I can organise mise en place and work safely.
- I can follow and adjust my production plan.
- I can present a completed product within the available time.

Suggested lesson sequence

PREPARE | Review practical expectations, allergens, hygiene, workflow, and success criteria.

PRODUCE | Students prepare the planned product. Teacher records practical observations.

MONITOR | Students note significant changes, timing issues and reasons for decisions during production.

PRESENT | Plate, photograph and label the finished product.

RESET | Complete cleaning, storage and equipment checks before dismissal.

PORTFOLIO EVIDENCE

Teacher observation; annotated workflow; change log; photograph of final product.

RESOURCES

Approved ingredients, equipment, recipe, workflow, device for photographs.

CHECK FOR LEARNING

Observe safety, organisation, technique, decision-making, time management and presentation.

LESSON 6 | EVALUATE, LEARN, AND IMPROVE

Learning intention: We are learning to use sensory evidence and feedback to evaluate Challenge 1 and propose realistic improvements.

Success criteria:

- I can collect useful sensory feedback.
- I can evaluate my product against the design criteria.
- I can propose specific and justified improvements.

Suggested lesson sequence

ENGAGE | Discuss the difference between “I liked it” and evidence-based sensory feedback.

EXPLORE | Complete a structured sensory evaluation using appearance, aroma, flavour, texture and overall appeal.

EXPLAIN | Model an evaluation paragraph using claim, evidence, reasoning and improvement.

APPLY | Students compare self, peer and teacher evidence with the original criteria.

REFLECT | Create a “Keep, Change, Try” improvement plan for Challenge 2.

PORTFOLIO EVIDENCE

Sensory results; evaluation against criteria; Keep, Change, Try plan.

RESOURCES

Sensory vocabulary bank, evaluation template, Challenge 1 photographs.

CHECK FOR LEARNING

Check that improvements are specific, feasible and linked to evidence.

WEEK 4

Lessons 7 and 8 • Mystery Box: The Challenge

WEEKLY FOCUS | Respond to constraints and adapt product ideas.

LESSON 7 | CHALLENGE 2: UNDERSTANDING CONSTRAINTS

Learning intention: We are learning to respond creatively when ingredients, consumers, time or equipment create new constraints.

Success criteria:

- I can explain how a constraint changes a design decision.
- I can identify multiple possible adaptations.
- I can justify an adaptation rather than treating a constraint as a problem only.

Suggested lesson sequence

ENGAGE | Introduce short constraint cards such as limited equipment, reduced time, vegetarian, low waste or target-consumer change.

EXPLORE | Teams rotate through constraint scenarios and adapt the same base concept in several ways.

EXPLAIN | Model modification strategies: substitute, reduce, combine, change technique, alter portion or re-sequence.

APPLY | Reveal the Challenge 2 mystery box and assigned constraint. Students map likely design impacts.

REFLECT | One-minute pitch: "Because the constraint is..., our strongest response could be..."

PORTFOLIO EVIDENCE

Constraint-response map; adaptation scenarios; one-minute design pitch.

RESOURCES

Constraint cards, Challenge 2 ingredient list, modification strategy prompts.

CHECK FOR LEARNING

Listen for cause-and-effect reasoning between constraint and adaptation.

LESSON 8 | CHALLENGE 2 IDEATION AND RECIPE ADAPTATION

Learning intention: We are learning to adapt recipes and product ideas to satisfy a more demanding mystery box and an assigned constraint.

Success criteria:

- I can generate several adapted ideas.
- I can explain the purpose of each recipe modification.
- I can select an idea that remains achievable and appealing.

Suggested lesson sequence

ENGAGE | Analyse an example recipe and identify what would need to change for a selected constraint.

EXPLORE | Students investigate substitutions, ratios, flavour balance and alternative techniques.

EXPLAIN | Model how one change can affect texture, flavour, nutrition, cost, time and food safety.

APPLY | Develop at least three adapted concepts and compare them against revised criteria.

REFLECT | Peer challenge: partners identify one hidden risk and one possible improvement.

PORTFOLIO EVIDENCE

Adapted concepts; annotated recipe changes; revised criteria; peer challenge notes.

RESOURCES

Sample recipe, substitution guide, research devices, concept sheet.

CHECK FOR LEARNING

Check that modifications retain product function and are not merely ingredient swaps.

WEEK 5

Lessons 9 and 10 • Mystery Box: The Challenge

WEEKLY FOCUS | Plan and produce Challenge 2: Adapt.

LESSON 9 | PLANNING CHALLENGE 2

Learning intention: We are learning to refine an adapted concept and create a precise production plan that manages risk, time, and resources.

Success criteria:

- I can justify my final adapted concept.
- I can sequence tasks efficiently within the lesson.
- I can identify control measures for food-safety and production risks.

Suggested lesson sequence

ENGAGE | Conduct a sequencing race using mixed-up production steps.

EXPLORE | Students test the logic of their workflow by tracing equipment, bench space, and timing.

EXPLAIN | Model parallel tasks, critical steps, contingency planning and quality checks.

APPLY | Finalise adapted recipe, production plan, plating sketch and risk controls.

REFLECT | Teacher approval conference: "What will you do if..." contingency questions.

PORTFOLIO EVIDENCE

Final adapted recipe; workflow; contingency notes; risk controls; plating plan.

RESOURCES

Planning templates, timers, equipment map, approval checklist.

CHECK FOR LEARNING

Check timing realism, dependencies, safe sequencing and clear responsibility if working in pairs.

LESSON 10 | CHALLENGE 2: ADAPT • PRACTICAL COOK

Learning intention: We are learning to safely produce an adapted food product while responding to constraints and changing conditions.

Success criteria:

- I can implement my adaptation safely.
- I can make and record informed changes during production.
- I can explain how my product responds to the assigned constraint.

Suggested lesson sequence

PREPARE | Revisit constraint, design criteria, allergens, safety and quality checkpoints.

PRODUCE | Students prepare the adapted product using the approved plan.

ADAPT | Students record deviations and explain the reason for each significant change.

PRESENT | Plate, photograph and add a short designer statement linking the product to the constraint.

RESET | Complete cleaning, storage and equipment checks.

PORTFOLIO EVIDENCE

Practical observation; annotated workflow; change log; photograph; designer statement.

RESOURCES

Approved ingredients, equipment, adapted recipe and workflow.

CHECK FOR LEARNING

Observe how well students respond to constraint, setbacks, time and quality checks.

WEEK 6

Lessons 11 and 12 • Mystery Box: The Challenge

WEEKLY FOCUS | Use evidence of growth and independently define the Grand Final opportunity.

LESSON 11 | COMPARING EVIDENCE AND TRACKING GROWTH

Learning intention: We are learning to compare two practical outcomes and identify evidence of growth in food technology decision-making.

Success criteria:

- I can compare Challenge 1 and Challenge 2 using evidence.
- I can identify a skill or decision that improved.
- I can set a focused goal for the Grand Final.

Suggested lesson sequence

ENGAGE | View before-and-after examples and discuss what counts as evidence of growth.

EXPLORE | Students place photographs, plans and feedback from both challenges side by side.

EXPLAIN | Model comparative language and evidence selection.

APPLY | Complete a comparison table covering planning, safety, technique, sensory quality, adaptation and evaluation.

REFLECT | Write one Grand Final goal and the actions required to achieve it.

PORTFOLIO EVIDENCE

Challenge comparison; evidence annotations; individual Grand Final goal.

RESOURCES

Portfolio evidence, photographs, comparison template, feedback records.

CHECK FOR LEARNING

Check that growth claims are supported by specific evidence from both challenges.

LESSON 12 | GRAND FINAL LAUNCH: CREATE

Learning intention: We are learning to independently define the opportunity, consumer, and criteria for the Grand Final Mystery Box challenge.

Success criteria:

- I can interpret the final mystery box independently.
- I can define a clear target consumer and their needs.
- I can create prioritised criteria for a successful final product.

Suggested lesson sequence

ENGAGE | Grand Final reveal with silent observation before discussion.

EXPLORE | Students independently analyse ingredients, opportunities, limitations, and possible product directions.

EXPLAIN | Revisit strong criteria and show how priorities may conflict.

APPLY | Complete final consumer profile, design opportunity statement, constraints and prioritised criteria.

REFLECT | Thirty-second individual pitch of the design opportunity, not the final dish.

PORTFOLIO EVIDENCE

Ingredient analysis; target consumer profile; opportunity statement; prioritised criteria.

RESOURCES

Grand Final ingredient list or box, consumer template, criteria checklist.

CHECK FOR LEARNING

Check independence, depth of analysis and alignment between consumer needs and criteria.

WEEK 7

Lessons 13 and 14 • Mystery Box: The Challenge

WEEKLY FOCUS | **Develop**, select, and plan the strongest final concept.

LESSON 13 | GRAND FINAL CONCEPT DEVELOPMENT

Learning intention: We are learning to develop and communicate original, feasible concepts that synthesise our learning from the unit.

Success criteria:

- I can generate at least three distinct final concepts.
- I can annotate ingredient function, technique, and sensory intent.
- I can use previous feedback to strengthen my ideas.

Suggested lesson sequence

ENGAGE | Review individual Grand Final goals and relevant feedback from Challenges 1 and 2.

EXPLORE | Use timed divergent-thinking rounds: product form, flavour direction, technique and presentation.

EXPLAIN | Model high-quality annotations that explain decision-making rather than label obvious features.

APPLY | Develop three annotated final concepts and identify how each responds to prior feedback.

REFLECT | Peer critique using “warm feedback, cool question, next step”.

PORTFOLIO EVIDENCE

Three annotated concepts; links to prior feedback; peer critique.

RESOURCES

Concept sheets, sensory vocabulary, previous feedback, research devices.

CHECK FOR LEARNING

Check concept distinctiveness, originality, feasibility and explanatory annotations.

LESSON 14 | GRAND FINAL DECISION AND PRODUCTION PLAN

Learning intention: We are learning to justify a final concept and create an independent, efficient and safe production plan.

Success criteria:

- I can select my strongest concept using weighted criteria.
- I can justify decisions about ingredients, nutrition, sensory appeal and sustainability.
- I can produce a complete, realistic and safe workflow.

Suggested lesson sequence

ENGAGE | Identify common final-practical failure points and convert each into a planning control.

EXPLORE | Apply a weighted decision matrix and challenge the result with professional judgement.

EXPLAIN | Model a complete final rationale and quality-control points.

APPLY | Finalise recipe, quantities, equipment, workflow, risk controls, plating sketch and contingency plan.

REFLECT | Formal teacher checkpoint and student readiness declaration.

PORTFOLIO EVIDENCE

Weighted decision matrix; design rationale; final recipe; workflow; controls; plating sketch.

RESOURCES

Final planning pack, approval checklist, equipment and time limits.

CHECK FOR LEARNING

Verify complete readiness, safe processes and clear justification before approval.

WEEK 8

Lessons 15 and 16 • Mystery Box: The Challenge

WEEKLY FOCUS | Complete the Grand Final and evaluate the full design journey.

LESSON 15 | GRAND FINAL MYSTERY BOX: CREATE • PRACTICAL COOK

Learning intention: We are learning to independently produce, present and document a successful food product that responds to the design brief.

Success criteria:

- I can manage time, equipment and ingredients independently.
- I can apply safe and appropriate techniques.
- I can make informed adjustments and complete a product that meets my criteria.

Suggested lesson sequence

PREPARE | Students independently review plans, establish mise en place and confirm safety controls.

PRODUCE | Complete the Grand Final product. Teacher records observations without directing design decisions.

CONTROL | Students monitor timing, doneness, texture, flavour balance and presentation, recording key adjustments.

PRESENT | Plate, photograph from appropriate angles and provide a concise product description.

RESET | Complete cleaning, storage and equipment accountability.

PORTFOLIO EVIDENCE

Final practical observation;
change log; final photographs;
product description.

RESOURCES

Approved ingredients,
equipment, final planning
pack, photography device.

CHECK FOR LEARNING

Assess independence, safety,
technique, management,
responsiveness and alignment
to criteria.

LESSON 16 | FINAL EVALUATION AND DESIGN SHOWCASE

Learning intention: We are learning to evaluate the Grand Final product and communicate how evidence demonstrates our growth as food technologists.

Success criteria:

- I can evaluate the final product against prioritised criteria.
- I can use sensory, practical and feedback evidence in my judgement.
- I can explain growth and propose a justified next iteration.

Suggested lesson sequence

ENGAGE | Return to the unit driving question and independently write an initial response.

EXPLORE | Complete final sensory analysis and organise evidence from the full design process.

EXPLAIN | Model a balanced judgement that recognises success, limitation and trade-off.

APPLY | Complete the final evaluation, improvement proposal and portfolio curation.

SHARE & REFLECT | Conduct a short design showcase, then answer the driving question and self-assess against the unit criteria.

PORTFOLIO EVIDENCE

Final sensory analysis;
evaluation; improvement
proposal; curated portfolio;
growth reflection.

RESOURCES

Evaluation template, full
portfolio, photographs, display
materials.

CHECK FOR LEARNING

Check alignment between
claims, evidence, criteria and
proposed improvement.

AUSTRALIAN CURRICULUM ALIGNMENT

Australian Curriculum Version 9.0 • Design and Technologies • Years 9–10

Curriculum context

This Year 9 Mystery Box unit is designed within the Years 9–10 Design and Technologies band. The strongest alignment is with the food specialisations context and the Processes and production skills strand. Students investigate a need or opportunity, develop criteria, generate and refine ideas, plan production, safely create food solutions and evaluate outcomes using evidence.

Years 9–10 achievement standard alignment

Across the unit, students demonstrate progress towards the Years 9–10 achievement standard by explaining factors that influence design decisions; analysing food technologies and their appropriateness; creating, adapting and refining ideas and solutions; justifying decisions against criteria including sustainability; communicating processes and solutions; managing projects; and selecting and using technologies skilfully and safely.

Relevant content descriptions

Code	Curriculum focus	Application in this unit	Lessons
AC9TDE10K01	Analyse how design and technologies professionals consider ethical and sustainability factors when improving designed solutions.	Ingredient choices, food waste, target-consumer needs, design criteria, and evaluation.	1–2, 6–8, 11–16
AC9TDE10K02	Analyse the influence of innovation, enterprise and emerging technologies on designed solutions and preferred futures.	Creative ideation, adapting to constraints, innovation and the Grand Final design rationale.	3, 7–8, 12–16
AC9TDE10K04	Analyse ethical and sustainable production and marketing considerations in food and fibre enterprises.	Ingredient sourcing, seasonality, resource use, waste reduction and sustainability decisions.	2, 7–8, 12–16
AC9TDE10K05	Analyse how sensory and functional properties of food influence the design and preparation of sustainable food solutions for healthy eating.	Ingredient-function investigations, recipe adaptation, sensory testing, nutrition and product evaluation.	2–3, 6, 8, 10–16
AC9TDE10K06	Analyse how characteristics of materials, systems, tools and equipment can be combined to create designed solutions.	Selection of ingredients, equipment, preparation methods and cooking techniques.	2–5, 8–10, 13–15

AC9TDE10P01	Analyse needs or opportunities, develop design briefs, and investigate and select resources for designed solutions.	Mystery Box brief, target consumer, criteria, constraints and ingredient investigation.	1–2, 7, 12
AC9TDE10P02	Apply innovation and enterprise skills to generate, test, iterate and communicate design ideas, processes and solutions, including with digital tools.	Concept generation, recipe adaptation, peer critique, photographs and portfolio communication.	3, 6–8, 11, 13, 16
AC9TDE10P03	Select, justify, test and use suitable technologies, skills and processes, and apply safety procedures to make designed solutions.	Production planning, food safety, practical cookery, quality control and informed adjustments.	4–5, 9–10, 14–15
AC9TDE10P04	Develop design criteria independently, including sustainability, to evaluate ideas, processes and solutions.	Decision matrices, criteria-based evaluations, sensory evidence and improvement proposals.	1, 4, 6, 8, 11–14, 16
AC9TDE10P05	Develop project plans for intended purposes and audiences, managing time, cost, risk, processes and production individually and collaboratively.	Recipes, workflows, equipment lists, timelines, risk controls, contingency planning and practical management.	4–5, 9–10, 14–15

Cross-curriculum priorities

Priority	Level of alignment	How it can be addressed	Suggested lessons
Sustainability	Strong and embedded	Students consider seasonality, sustainable ingredient choices, efficient resource use, food waste, product feasibility, and improvements that support more sustainable food solutions.	2, 4, 6–10, 12–16
Aboriginal and Torres Strait Islander Histories and Cultures	Authentic extension opportunity	Where locally approved resources, community guidance and appropriate cultural protocols are available, students may investigate native ingredients, food knowledge and sustainable practices. Knowledge must be treated respectfully and not presented as generic or freely transferable.	Best integrated into 2, 7, 12 or 13
Asia and Australia's Engagement with Asia	Authentic extension opportunity	Students may investigate Asian ingredients, flavour systems, preparation techniques and the influence of Asian cuisines on contemporary Australian food culture. Links should arise from the selected mystery-box ingredients and target consumer rather than being added as a token activity.	Best integrated into 2–3, 8, 12–13

General capabilities

Capability	Embedded application
Literacy	Interpret briefs and labels; use technical and sensory vocabulary; justify decisions; produce evaluations and designer statements.
Numeracy	Measure quantities; scale recipes; manage time; interpret sensory data; compare criteria weightings and, where used, calculate cost or yield.
Digital Literacy	Research ingredients; document design development; use digital tools to communicate ideas, photographs, feedback and portfolio evidence.
Critical and Creative Thinking	Generate alternatives; compare ideas; solve constraints; test assumptions; refine products and propose evidence-based improvements.
Personal and Social Capability	Collaborate, manage practical responsibilities, seek and use feedback, regulate time and reflect on growth.
Ethical Understanding	Consider food safety, consumer needs, allergies, waste, sourcing, sustainability and responsible decision-making.
Intercultural Understanding	Respectfully investigate diverse food traditions, ingredient uses and consumer preferences without stereotyping.

Assessment alignment

Assessment evidence	Aligned codes	Evidence of achievement
Ingredient investigation and design brief	AC9TDE10K05, AC9TDE10P01	Explains ingredient properties, the design opportunity, target consumer, criteria and constraints.
Concept generation and selection	AC9TDE10P02, AC9TDE10P04	Generates distinct ideas, communicates decisions and justifies the preferred concept against criteria.
Production planning	AC9TDE10P03, AC9TDE10P05	Develops a feasible workflow addressing time, resources, risk, food safety and production controls.
Three practical challenges	AC9TDE10K05, AC9TDE10P03, AC9TDE10P05	Selects and uses ingredients, equipment, techniques and processes safely; adapts when required.
Sensory testing and evaluation	AC9TDE10K05, AC9TDE10P04	Uses sensory evidence, feedback and sustainability criteria to judge success and identify improvement.
Final design portfolio	AC9TDE10P01–P05	Communicates the complete design process and demonstrates development from Learn to Adapt to Create.