

# DESIGN & TECHNOLOGY PLANNING

## Y10 GCSE: Art & Design: 3D Product Design

| TERM 1                                      |  |               |          |  | TERM 2                          |                              |    |        |           | TERM 3                  |                        |     |    |        |                             |                       |                  |    |
|---|--|---------------|----------|--|---------------------------------|------------------------------|----|--------|-----------|-------------------------|------------------------|-----|----|--------|-----------------------------|-----------------------|------------------|----|
| WK  |  | LESSON        | ACTIVITY |  | HWK                             | WK                           |    | LESSON | ACTIVITY  |                         | HWK                    | WK  |    | LESSON | ACTIVITY                    |                       | HWK              |    |
| WHAT IS 3D PRODUCT DESIGN (6)               |  |               |          |  | NATURAL FORMS - BOX DESIGN (18) |                              |    |        |           | TOY CAR DESIGN (18)     |                        |     |    |        |                             |                       |                  |    |
| RESOURCES                                   |  | class sets of |          |  | RESOURCES                       | class sets of                |    |        | RESOURCES | class sets of           |                        |     |    |        |                             |                       |                  |    |
| DESIGNER PROFILE - MEMPHIS THEMED LAMP (12) |  | 1&2           |          |  | 1                               | Intro to course/expectations | 1  | 37     |           |                         | Intro to Natural Forms | 7   | 73 |        |                             | Intro to Classic Cars |                  |    |
|   |  | 2             |          |  | Research & Moodboard            |                              | 38 |        |           | Moodboard and Analysis  |                        | 74  |    |        | Big Picture/Analysis        |                       |                  |    |
|   |  | 3             |          |  | Research & Moodboard            |                              | 39 |        |           | Sketching Techniques    |                        | 75  |    |        | Researching cars            | 13                    |                  |    |
|   |  | 4             |          |  | Research & Moodboard            |                              | 40 |        |           | Generating ideas in 2D  |                        | 76  |    |        | Researching wooden toy cars |                       |                  |    |
|   |  | 5             |          |  | Update Portfolio                |                              | 41 |        |           | Generating ideas in 3D  |                        | 77  |    |        | Materials and processes     |                       |                  |    |
|   |  | 6             |          |  | Update Portfolio                |                              | 42 |        |           | Testing and Trialing    |                        | 78  |    |        | Designing with Tech Soft    |                       |                  |    |
| RESOURCES                                   |  | 7             |          |  | Introduction                    |                              | 43 |        |           | Testing and Trialing    |                        | 79  |    |        | Modelling                   |                       |                  |    |
| class sets of                               |  | 3&4           |          |  | 8                               | Gathering research           | 2  | 44     |           |                         | Box Construction       |     | 80 |        |                             | Tools and equipment   |                  |    |
|   |  | 9             |          |  | Presenting research             |                              | 45 |        |           | Box Construction        | 8                      | 81  |    |        | Marking Out                 |                       |                  |    |
|   |  | 10            |          |  | Analysing research              |                              | 46 |        |           | Box Construction        |                        | 82  |    |        | Cutting and Shaping         | 14                    |                  |    |
|   |  | 11            |          |  | Designing a 3D Product          |                              | 47 |        |           | Box Construction        |                        | 83  |    |        | Cutting and Shaping         |                       |                  |    |
|   |  | 12            |          |  | Designing a 3D Product          |                              | 48 |        |           | Box Construction        |                        | 84  |    |        | Cutting and Shaping         |                       |                  |    |
|   |  | 13            |          |  | Designing a 3D Product          |                              | 49 |        |           | Experimentation         |                        | 85  |    |        | Drilling Holes              |                       |                  |    |
| 5&6   |  | 14            |          |  | Modelling ideas                 |                              | 50 |        |           | Creating a Lid Design   |                        | 86  |    |        | Sanding                     |                       |                  |    |
|   |  | 15            |          |  | Modelling ideas                 | 3                            | 51 |        |           | Creating a Lid Design   |                        | 87  |    |        | Assembly                    |                       |                  |    |
|   |  | 16            |          |  | Modelling ideas                 |                              | 52 |        |           | Apply Finish / Evaluate | 9                      | 88  |    |        | Decorate and Finishing      | 15                    |                  |    |
|   |  | 17            |          |  | Update Portfolio                |                              | 53 |        |           | Update Portfolio        |                        | 89  |    |        | Evaluation                  |                       |                  |    |
|   |  | 18            |          |  | Update Portfolio                |                              | 54 |        |           | Update Portfolio        |                        | 90  |    |        | Update Portfolio            |                       |                  |    |
|   |  |               |          |  |                                 |                              |    |        |           |                         |                        |     |    |        |                             |                       |                  |    |
| UNDERSTANDING VISUAL ELEMENTS - (18)        |  |               |          |  | CAD/CAM (18)                    |                              |    |        |           | MOCK EXAM PREP (12)     |                        |     |    |        |                             |                       |                  |    |
| RESOURCES                                   |  | class sets of |          |  | RESOURCES                       | class sets of                |    |        | RESOURCES | class sets of           |                        |     |    |        |                             |                       |                  |    |
| 7&8   |  | 19            |          |  | colour: RESEARCH                | 4                            | 55 |        |           | Intro to CAD/CAM        |                        | 91  |    |        | Investigating a Context     |                       |                  |    |
|   |  | 20            |          |  | colour: APPLY                   |                              | 56 |        |           | Intro to Tech Soft      |                        | 92  |    |        | Artist/Designer             |                       |                  |    |
|   |  | 21            |          |  | line: RESEARCH                  |                              | 57 |        |           | Tech Soft Task 1        | 10                     | 93  |    |        | Develop                     | 16                    |                  |    |
|   |  | 22            |          |  | line: APPLY                     |                              | 58 |        |           | Tech Soft Task 2        |                        | 94  |    |        | Refine                      |                       |                  |    |
|   |  | 23            |          |  | form: RESEARCH                  |                              | 59 |        |           | Tech Soft Task 3        |                        | 95  |    |        | Record                      |                       |                  |    |
|   |  | 24            |          |  | form: APPLY                     |                              | 60 |        |           | Laser cutting           |                        | 96  |    |        | Present                     |                       |                  |    |
| 9&10  |  | 25            |          |  | tone: RESEARCH                  |                              | 61 |        |           | Intro to Sketch up      |                        | 97  |    |        | MOCK EXAMS                  |                       |                  |    |
|   |  | 26            |          |  | tone: APPLY                     |                              | 62 |        |           | Creating 3D forms       |                        | 98  |    |        |                             |                       |                  |    |
|   |  | 27            |          |  | texture: RESEARCH               | 5                            | 63 |        |           | Creating 3D forms       |                        | 99  |    |        |                             |                       |                  |    |
|   |  | 28            |          |  | shape: APPLY                    |                              | 64 |        |           | Dimensioned Drawings    | 11                     | 100 |    |        |                             |                       |                  |    |
|   |  | 29            |          |  | pattern: RESEARCH               |                              | 65 |        |           | Sketch up Task 1        |                        | 101 |    |        | Mock Practical Exam         |                       |                  |    |
|   |  | 30            |          |  | pattern: APPLY                  |                              | 66 |        |           | Sketch up Task 1        |                        | 102 |    |        | Mock Practical Exam         |                       |                  |    |
| 11&12                                       |  | 31            |          |  | composition: RESEARCH           |                              | 67 |        |           | Sketch up Task 2        |                        | 103 |    |        | WORK EXPERIENCE             |                       |                  |    |
|   |  | 32            |          |  | composition: APPLY              |                              | 68 |        |           | Sketch up Task 2        |                        | 104 |    |        |                             |                       | WORK EXPERIENCE  | 18 |
|   |  | 33            |          |  | Reflect and refine              | 6                            | 69 |        |           | Sketch up Task 3        | 12                     | 105 |    |        |                             |                       | Update Portfolio |    |
|   |  | 34            |          |  | Reflect and refine              |                              | 70 |        |           | Sketch up Task 3        |                        | 106 |    |        |                             |                       | Update Portfolio |    |
|   |  | 35            |          |  | Update Portfolio                |                              | 71 |        |           | Update Portfolio        |                        | 107 |    |        | Update Portfolio            |                       |                  |    |
|   |  | 36            |          |  | Update Portfolio                |                              | 72 |        |           | Update Portfolio        |                        | 108 |    |        | Update Portfolio            |                       |                  |    |



DESIGN & TECHNOLOGY PLANNING

Y11 GCSE: Art & Design: 3D Product Design

TERM 1

| WK LESSON                            |                  | ACTIVITY                |                         | HWK |
|--------------------------------------|------------------|-------------------------|-------------------------|-----|
| Y10 PORTFOLIO OF EVIDENCE (6)        |                  |                         |                         |     |
| RESOURCES<br>class sets of           | 1&2              |                         | 1                       |     |
|                                      | 2                | Toy Car Project         |                         |     |
|                                      | 3                | Lighting Project        |                         | 1   |
|                                      | 4                | Box Project             |                         |     |
|                                      | 5                | Box Project             |                         |     |
|                                      | 6                | CAD                     |                         |     |
|                                      | 11&12            |                         |                         |     |
|                                      | 31               | Sanding                 |                         |     |
|                                      | 32               | Assembly                |                         |     |
|                                      | 33               | Assembly                |                         | 6   |
|                                      | 34               | Decorate and Finishing  |                         |     |
|                                      | 35               | Evaluation              |                         |     |
| 36                                   | Update Portfolio |                         |                         |     |
| DESIGNER PROFILE - TABLE DESIGN (30) |                  |                         |                         |     |
| RESOURCES<br>class sets of           | 7                |                         | Investigating a Context | 2   |
|                                      | 8                | Analysis and Mindmap    |                         |     |
|                                      | 9                | Artist/Designer         |                         |     |
|                                      | 10               | Artist/Designer         |                         |     |
|                                      | 11               | Mood board              |                         |     |
|                                      | 12               | Mood board              |                         |     |
|                                      | 13               | Develop                 |                         |     |
|                                      | 14               | Sketching from research |                         |     |
|                                      | 15               | Designing ideas         |                         | 3   |
|                                      | 16               | CAD ideas               |                         |     |
|                                      | 17               | Refine                  |                         |     |
|                                      | 18               | Development             |                         |     |
|                                      | 19               | Experimentation         |                         |     |
|                                      | 20               | Annotation              |                         | 4   |
|                                      | 21               | Sketch Modelling        |                         |     |
|                                      | 22               | Present                 |                         |     |
|                                      | 23               | Modelling final idea    |                         |     |
|                                      | 24               | Planning Manufacture    |                         |     |
|                                      | 25               | Construction of Table   |                         |     |
|                                      | 26               | Marking out             |                         |     |
|                                      | 27               | Cutting & Shaping       |                         | 5   |
|                                      | 28               | Cutting & Shaping       |                         |     |
|                                      | 29               | Cutting & Shaping       |                         |     |
|                                      | 30               | Record                  |                         |     |

TERM 2

| WK LESSON                  |       | ACTIVITY |                        | HWK                     |    |
|----------------------------|-------|----------|------------------------|-------------------------|----|
| MOCK EXAM PREP (36)        |       |          |                        |                         |    |
| RESOURCES<br>class sets of | 13&14 |          | 37                     | Investigating a Context | 7  |
|                            |       |          | 38                     | Analysis and Mindmap    |    |
|                            |       |          | 39                     | Artist/Designer         |    |
|                            |       |          | 40                     | Artist/Designer         |    |
|                            |       |          | 41                     | Mood board              |    |
|                            |       |          | 42                     | Mood board              |    |
|                            | 15&16 |          | 43                     | Develop                 |    |
|                            |       |          | 44                     | Sketching from research |    |
|                            |       |          | 45                     | Designing Ideas         | 8  |
|                            |       |          | 46                     | CAD ideas               |    |
|                            |       |          | 47                     | Analysis and Mindmap    |    |
|                            |       |          | 48                     | Artist/Designer         |    |
|                            | 17&18 |          | 49                     | Refine                  |    |
|                            |       |          | 50                     | Development             |    |
|                            |       |          | 51                     | Experimentation         |    |
|                            |       |          | 52                     | Annotation              | 9  |
|                            |       |          | 53                     | Sketch Modelling        |    |
|                            |       |          | 54                     | Present                 |    |
|                            | 19&20 |          | 55                     | Modelling final idea    |    |
|                            |       |          | 56                     | Planning Manufacture    |    |
|                            |       |          | 57                     | Construction of Table   |    |
|                            |       |          | 58                     | Marking out             | 10 |
|                            |       |          | 59                     | Cutting & Shaping       |    |
|                            |       |          | 60                     | Cutting & Shaping       |    |
|                            |       | 61       | Cutting & Shaping      |                         |    |
| 21&22                      |       | 62       | Record                 |                         |    |
|                            |       | 63       | Sanding                |                         |    |
|                            |       | 64       | Assembly               |                         |    |
|                            |       | 65       | Assembly               | 11                      |    |
|                            |       | 66       | Assembly               |                         |    |
|                            |       | 67       | Decorate and Finishing |                         |    |
|                            |       | 68       | Decorate and Finishing |                         |    |
|                            |       | 69       | Evaluation             |                         |    |
| 23&24                      |       | 70       | Update Portfolio       | 12                      |    |
|                            |       | 71       | Update Portfolio       |                         |    |
|                            |       | 72       | Update Portfolio       |                         |    |

TERM 3

| PORTFOLIO OF EVIDENCE (18) |       |                  |                       | WK LESSON | ACTIVITY | HWK |
|----------------------------|-------|------------------|-----------------------|-----------|----------|-----|
| RESOURCES<br>class sets of | 73    |                  | CAD Module            |           |          |     |
|                            | 74    |                  | Sketch Up             |           |          |     |
|                            | 75    |                  | Sketch Up             |           | 13       |     |
|                            | 76    |                  | Sketch Up             |           |          |     |
|                            | 77    |                  | Sketch Up             |           |          |     |
|                            | 78    |                  | Sketch Up             |           |          |     |
|                            | 25&26 |                  |                       |           |          |     |
|                            | 27&28 |                  |                       |           |          |     |
|                            | 80    |                  | Finishing 3D outcomes |           |          |     |
|                            | 81    |                  | Finishing 3D outcomes |           |          |     |
|                            | 82    |                  | Finishing 3D outcomes |           | 14       |     |
|                            | 83    |                  | Finishing 3D outcomes |           |          |     |
|                            | 84    |                  | Finishing 3D outcomes |           |          |     |
|                            | 29&30 |                  |                       |           |          |     |
|                            | 85    |                  | Reflect and Refine    |           |          |     |
|                            | 86    |                  | Annotation            |           |          |     |
|                            | 87    |                  | Sketching             |           |          |     |
|                            | 88    |                  | Analysis              |           | 15       |     |
| 89                         |       | Update Portfolio |                       |           |          |     |
| 90                         |       | Update Portfolio |                       |           |          |     |
| STUDY LEAVE                |       |                  |                       |           |          |     |
| 31&32                      |       |                  |                       |           |          |     |
| 91                         |       |                  |                       |           |          |     |
| 92                         |       |                  |                       |           |          |     |
| 93                         |       |                  |                       |           | 16       |     |
| 94                         |       |                  |                       |           |          |     |
| 95                         |       |                  |                       |           |          |     |
| 96                         |       |                  |                       |           |          |     |
| 33&34                      |       |                  |                       |           |          |     |
| 97                         |       |                  |                       |           |          |     |
| 98                         |       |                  |                       |           |          |     |
| 99                         |       |                  |                       |           |          |     |
| 100                        |       |                  |                       |           | 17       |     |
| 101                        |       |                  |                       |           |          |     |
| 102                        |       |                  |                       |           |          |     |
| 35&36                      |       |                  |                       |           |          |     |
| 103                        |       |                  |                       |           |          |     |
| 104                        |       |                  |                       |           |          |     |
| 105                        |       |                  |                       |           |          | 18  |
| 106                        |       |                  |                       |           |          |     |
| 107                        |       |                  |                       |           |          |     |
| 108                        |       |                  |                       |           |          |     |

PUBLIC EXAMS