

# Area of Experience: Technology

## Technology

At Junior Certificate level the student can:

- |  |  |
|--|--|
| <b>1 Craft and Materials</b>   | <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> |
| Work with materials having practised the basic skills appropriate for assembling finished pieces |  |
| <b>2 Theory</b>  | <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> |
| Display basic background knowledge of technology   |  |
| <b>3 Technology and Society</b>  | <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> |
| Display a basic knowledge of the effects of developments in technology on society                |  |
| <b>4 Design Brief</b>  | <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> |
| Compile a design brief for a selected technology project   |  |

Work begun  | Work in progress  | Work completed

# Craft and Materials

## Technology

Statement Code no: 1

Student:

Class:

At Junior Certificate level the student can:

Work with materials having practised the basic skills appropriate for assembling finished pieces

Date Commenced: / /

Date Awarded: / /

### Learning Targets - This has been demonstrated by your ability to:

- |    |   |                          |                          |                          |
|----|---|--------------------------|--------------------------|--------------------------|
| 1  | Follow basic technology room rules  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 2  | Understand the reasons for safety procedures  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 3  | Understand and follow safety procedures   | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 4  | Understand and be able to make basic drawings, for example, orthographic, isometric and oblique | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 5  | Measure and mark out the material, using the appropriate tools and measuring instruments        | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 6  | Design and cut out simple shapes  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 7  | Display manual dexterity through assembly   | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 8  | Produce a simple piece of work  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 9  | Produce your own simple solution to a basic technology working problem                          | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 10 | Understand the uses of joints   | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 11 | List the steps needed to make a simple object   | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 12 | Examine the finished item you have made and identify the improvements that could be made        | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

Refer also to: English, Art, Maths, Materials Technology: Metal, Technical Graphics, Materials Technology: Wood, Science

Work begun    | Work in progress    | Work completed

At Junior Certificate level the student can:

## Display basic background knowledge of technology

Date Commenced: / /

Date Awarded: / /

### Learning Targets - This has been demonstrated by your ability to:

- |   |  |                          |                          |                          |
|---|--|--------------------------|--------------------------|--------------------------|
| 1 | Recognise forms of energy, for example, mechanical, chemical, electrical etc.  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 2 | Recognise devices that convert energy from one form to another                 | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 3 | Learn the units of energy and power  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 4 | Understand structures that maintain shape under load                           | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 5 | Display an understanding of the use of mechanisms                              | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 6 | Display an understanding of basic electric circuits, for example, lamp circuit | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 7 | Understand the uses of simple electronic systems                               | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 8 | Understand the basic uses of pneumatics  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 9 | Understand the basic uses of robotics  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

Refer also to: English, Art, Maths, Science, Materials Technology: Metal, Technical Graphics, Materials Technology: Wood,

Work begun    | Work in progress    | Work completed

# Technology and Society

## Technology

Statement Code no: 3

Student:

Class:

At Junior Certificate level the student can:

Display a basic knowledge of the effects of developments in technology on society

Date Commenced: / /

Date Awarded: / /

### Learning Targets: Select any 5 objectives to work on

- This has been demonstrated by your ability to:

- 6 The technology gap between the first and third worlds**
- (a) List two differences between technology in the first and third worlds
- (b) Identify two advantages and two disadvantages of technological developments in the first and third worlds
- 7 Technology and Industry**
- (a) List two aspects of technology in industry
- (b) Identify two advantages and two disadvantages of technology for industry
- 8 Technology in the Home**
- (a) List two aspects of technology in the home
- (b) Identify two advantages and two disadvantages of technology in the home
- 9 Food Technology**
- (a) List two aspects of food technology
- (b) Identify two advantages and two disadvantages of food technology
- 10 An aspect of the history of design**
- (a) In the case of two products, identify the design changes that have occurred over the years
- (b) Identify two advantages and two disadvantages of these changes on the products

Refer also to: English, Art, Maths, Materials Technology: Metal, Materials Technology: Wood, Technical Graphics, Science

Work begun    | Work in progress    | Work completed

# Design Brief

## Technology

Statement Code no: 4

Student:

Class:

At Junior Certificate level the student can:

Compile a design brief for a selected technology project

Date Commenced: / /

Date Awarded: / /

### Learning Targets - This has been demonstrated by your ability to:

- |   |                          |                          |                          |
|---|--------------------------|--------------------------|--------------------------|
| 1 Give two reasons for your choice of project from the given selection                        | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 2 Design three pieces and choose one, giving reasons for your choice                          | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 3 Draw a schematic drawing for each piece of your chosen project                              | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 4 List the materials for cutting  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 5 Record each piece   | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 6 Record the work process involved  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 7 Record the process involved in assembling the pieces of the project                         | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 8 Identify faults in the design, if any   | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 9 Identify difficulties you have come across in designing, making and assembling your project | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

Refer also to: English, Art, Maths, Materials Technology: Metal, Technical Graphics, Science

Work begun    | Work in progress    | Work completed