**Y10 GCSE Design and Technology**

**Material types, properties and structures Assessment Cycle 1**

1.8 Ferrous and non-ferrous metals

1.9 Papers and boards

1.10 Polymers

1.11 Textiles

1.12 Natural and manufactured timbers

1.13 Contextual practice

**Informing design decisions Assessment Cycle 2**

1.2 Informing design decisions

**New and emerging technologies Assessment Cycle 2**

1.1 Impact of new and emerging technologies

**Energy, materials, devices and systems**

1.3 How energy is generated and stored

1.4 Modern and smart materials

1.5 The functions of mechanical devices

1.6 Electronic systems

1.7 The use of programmable components

**Specialism (Paper & Board or Timbers) Assessment Cycle 3**

2.1 Design contexts

2.2 Sources, origins and properties

2.3 Influencing selection

2.4 The impact of forces and stresses

2.5 Stock forms, types and sizes

2.6 Manufacturing processes

2.7 Specialist tools, equipment and processes

2.8 Surface treatments and finishes

**Designing principles Assessment Cycle 4**

1.14 Investigate social and economic challenges

1.15 Investigate the work of others

1.16 Avoiding design fixation

1.17 Developing design ideas