| Subject Overview        |                                                                                                                 |                                                                                                                                              |                                                           |                                                                                                            |                                                                            |                                                                  |  |  |  |  |  |
|-------------------------|-----------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------|------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------|------------------------------------------------------------------|--|--|--|--|--|
| Year 8                  |                                                                                                                 |                                                                                                                                              |                                                           |                                                                                                            |                                                                            |                                                                  |  |  |  |  |  |
|                         | Half Term 1                                                                                                     | Half Term 2                                                                                                                                  | Half Term 3                                               | Half Term 4                                                                                                | Half Term 5                                                                | Half Term 6                                                      |  |  |  |  |  |
| Topic                   | Mechanisms                                                                                                      | Mechanisms                                                                                                                                   | Nightlight                                                | Nightlight                                                                                                 | USB cover                                                                  | USB cover                                                        |  |  |  |  |  |
| Learning<br>Objectives  | Types of motion,<br>Mechanisms, Cam,<br>linkages. Leavers,<br>Creating vector<br>graphics for laser<br>cutting. | Types of motion,<br>Mechanisms, Cam,<br>linkages. Leavers,<br>Creating vector<br>graphics for laser<br>cutting.<br>Prototyping<br>Evaluation | Electronic<br>components,<br>LEDs, LDRs<br>capacitors     | Soldering<br>Electronic<br>systems<br>Electronic<br>Components<br>Electronic<br>Circuits<br>Wood finishing | Target Market<br>excising products<br>plastics<br>production<br>3d Drawing | sketch planes<br>extruding<br>constraints<br>plastics properties |  |  |  |  |  |
| Key<br>Vocabulary       | <u>Glossary</u>                                                                                                 | <u>Glossary</u>                                                                                                                              | <u>Glossary</u>                                           | Glossary                                                                                                   | <u>Glossary</u>                                                            | <u>Glossary</u>                                                  |  |  |  |  |  |
| Formative<br>Assessment | Ongoing knowledge<br>test through topic<br>progression                                                          | Ongoing knowledge<br>test through topic<br>progression                                                                                       | Ongoing<br>knowledge test<br>through topic<br>progression | Ongoing<br>knowledge test<br>through topic<br>progression                                                  | Ongoing<br>knowledge test<br>through topic<br>progression                  | Ongoing<br>knowledge test<br>through topic<br>progression        |  |  |  |  |  |
| Summative<br>Assessment | Evaluation analysis<br>against the brief                                                                        | Evaluation analysis against the brief                                                                                                        | Evaluation<br>analysis against<br>the brief               | Evaluation<br>analysis against<br>the brief                                                                | Evaluation<br>analysis against<br>the brief                                | Evaluation<br>analysis against<br>the brief                      |  |  |  |  |  |
| Scaffolding<br>for SEND | Reassess processes as appropriate                                                                               | Reassess processes<br>as appropriate                                                                                                         | Reassess<br>processes as<br>appropriate                   | Reassess<br>processes as<br>appropriate                                                                    | Reassess<br>processes as<br>appropriate                                    | Reassess<br>processes as<br>appropriate                          |  |  |  |  |  |

| Careers                                            | Creative,                      | Creative,                      | Creative,                      | Creative,                      | Creative,                                                     | Creative,                                                     |
|----------------------------------------------------|--------------------------------|--------------------------------|--------------------------------|--------------------------------|---------------------------------------------------------------|---------------------------------------------------------------|
|                                                    | construction and                                              | construction and                                              |
|                                                    | engineering                    | engineering                    | engineering                    | engineering                    | engineering                                                   | engineering                                                   |
| Links (prior<br>knowledge,<br>future<br>knowledge) | Building on CAD<br>from year 7 | Building on CAD<br>from year 7<br>CAM Knowledge<br>for year 9 | Building on CAD<br>from year 7<br>CAM Knowledge<br>for year 9 |