SEG Awards Level 2

Motor Vehicle Studies

**Underpinning Knowledge Evidence Record**

R/601/6135 Knowledge of Vehicle Colour Matching

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| **Learners Name** |  |
| **SEG Awards Registration Number** |  |
| **Centre Name** |  |
| **Assessor 1 Name**  |  |
| **Assessor 2 Name**  |  |

**DECLARATION OF AUTHENTICITY**

This declaration must be completed and signed by the learner and countersigned by the tutor / assessor and covers all evidence submitted for moderation.

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| --- | --- |
| Learner Name |  |
| Unique Learner Number (ULN) |  | SEGLearner Reg. ID |  |
| Qualification Title |  |
| Centre Name |  |

# Learner statement of authenticity

**Before signing please read the guidance below**.

I confirm, that the attached assignment / portfolio is all my own work[[1]](#footnote-1) and does not include any work completed by anyone other than myself. I have completed the assignment / portfolio in accordance with SEG Awards’ instructions and within the time limits set by my centre.

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| Signature |  | Date |  |

# Centre confirmation of authenticity

On behalf of …………………………………….(insert centre name), I confirm that the above mentioned learner, to the best of my knowledge, is the sole author of the completed assignment / portfolio attached, and the assessments have been completed under the required conditions.

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| --- | --- | --- | --- |
| Signed |  | Date |  |
| Name |  |
| Title |  |

**Guidance for Learners**

You have been asked to sign this Declaration of Authenticity and place it at the front of your portfolio or course work assessment. It confirms that the work you have submitted for assessment is your own and that you have not copied it from someone else or allowed another learner to copy it from you.

When preparing any course work it is good practice to undertake research using information from published sources. If you quote directly from these sources then this must be indicated in your work by using quotation marks and referencing the document from which the quotation was taken. You must then comment in your own words on any ideas expressed.

Assessors, internal verifiers and SEG Awards’ external moderators and verifiers are subject specialists who can spot the use of published materials that may be passed as your own words or ideas.

If you do copy words from a published source and do not indicate their reference you will be committing plagiarism. This is considered a form of cheating and may result in your assessment being declared void.

**Contents**

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| **Task No** | **Title** | **Assessment Criteria** |
| 1 | Colour theory | 1.1, 1.2, 1.3, 1.4, 1.5, 1.6, 1.7 |
| 2 | Paint coatings, ingredients and their application | 2.1, 2.2, 2.3, 2.4, 2.5, 2.6, 2.7, 2.8 |
| 3 | Mixing and matching vehicle paint colours | 3.1, 3.2, 3.3, 3.4, 3.5, 3.6, 3.7, 3.6, 3.9 |

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| **Task 1 - Colour theory** | **Assessment Criteria 1.1, 1.2, 1.3, 1.4, 1.5, 1.6, 1.7** |

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| **Describe the colours of the spectrum** |
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| **List the primary colours** |
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| **Explain the effect by which pigments produce visible colour including black and white** |
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| **List common colour classification systems** |
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| **In the table below describe the 4 common colour terms** |
| **Term** | **Description of Term** |
| **Colour** |  |
| **Strength** |  |
| **Hue** |  |
| **Chroma** |  |

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| **In the table below explain the effect of the viewing environment on colour matching** |
| **Viewing Environment** | **The effect on colour matching** |
| **Artificial light** |  |
| **Natural light** |  |

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| **In the table below explain the terms and their effects on colour matching** |
| **Term** | **Explain the terms** | **Effects on colour matching** |
| **Gloss** |  |  |
| **Opacity** |  |  |
| **Metamerism** |  |  |

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| **Task 2 - Paint coatings, ingredients and their application** | **Assessment Criteria 2.1, 2.2, 2.3, 2.4, 2.5, 2.6, 2.7, 2.8** |

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| **In the table below explain the purpose of the 3 common paint materials listed** |
| **Paint Materials** | **Explain the Purpose** |
| **Anti-corrosion** |  |
| **Protection** |  |
| **Visual** |  |

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| **In the table below identify 5 types of undercoat explaining their functions and uses** |
| **Types of Undercoat** | **Explain their Functions** | **Explain their Uses** |
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| **In the table below identify 4 types of topcoat explaining their functions and uses** |
| **Types of Topcoat** | **Explain their Functions** | **Explain their Uses** |
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| **In the table below identify and explain the basic ingredients in paint** |
| **Ingredient** | **Explain their Purpose** |
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| **In the table below identify and explain the types of paint available and their functions** |
| **Type of Paint** | **Explain their Functions** |
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| **In the table below identify and explain the types of pigment available and their functions** |
| **Type of Pigment** | **Explain their Function** |
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| **In the table below identify and explain the types of solvent available and their functions** |
| **Type of Solvent** | **Explain their Function** |
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| **Explain the purpose of testing paint and conditions** |
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| **Task 3 - Mixing and matching vehicle paint colours** | **Assessment Criteria 3.1, 3.2, 3.3, 3.4, 3.5, 3.6, 3.7, 3.6, 3.9** |

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| **In the table below identify the type of information included in common sources of technical information and their use** |
| **Sources of Information**  | **Type of information included** | **Use** |
| **Computer based material** |  |  |
| **Paint manufacturers’ information** |  |  |
| **Paint information sheets** |  |  |
| **Internet**  |  |  |
| **Vehicle identification number / paint code** |  |  |

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| **In the table below identify 3 paint substrates, the methods that are used to identify them and explain the importance of correct identification**  |
| **Substrate** | **Method of identification** | **Importance of correct substrate identification** |
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| **Explain how to compare, mix, test and adjust colour tones and effects, including metallic and mica finishes** |
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| **Explain the consequences of adding too much of one type of tinter and the process for correcting and adjusting** |
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| **Describe how to use test panels and colour test cards including drying and the importance of doing so** |
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| **In the table below describe the effect that the following techniques and adjustments can have on metallic colour** |
| **Spray equipment adjustment and techniques** | **Effect on metallic colour** |
| **High pressure** |  |
| **Low pressure** |  |
| **Gun speed** |  |
| **Gun distance** |  |
| **Application too wet** |  |
| **Application too dry** |  |

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| **In the table below explain how to identify the causes of colour mismatch and state how to rectify it** |
| **Description of Fault/Mismatch** | **Cause of Colour Mismatch** | **Rectification Process** |
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| **Explain how to assess and evaluate the need for blending techniques to achieve an acceptable colour match** |
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| **Describe the importance of correctly preparing the existing finish for colour matching and checking the match using the correct light source** |
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1. Unless otherwise stated e.g. for some entry level qualifications, learners can work together but should identify sections which are their own work. [↑](#footnote-ref-1)