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| **Achievement level** | **Criterion A: Investigate**  **Level descriptor** | |
| **0** | You did not reach a standard described by any of the descriptors given below. |  |
| **1–2** | You **stated** the problem.  You investigated the problem, collecting information from **few** sources.  You listed some specification points. | Your explanation of robotics in society is brief and lacks originality.  Your explanations of Lego Mindstorms & SumoBots are incomplete and/or incorrect.  You have not completed a complete bibliography |
| **3–4** | You **described** the problem, mentioning its relevance.  You investigated the problem, selecting and analysing information from **some** acknowledged sources.  You described a test to evaluate the product/solution against the design specification. | You have described one use of robotics in some detail and have made some predictions. You have mentioned other areas but have not explained them.  You have fully explained the input & output devices of the Mindstorms kits.  You have researched SumoBots and discussed possible design ideas.  You have completed a design specification and described how to test the success of your sumo robot designs.  You have competed a bibliography and have explained you choice of sources. |
| **5–6** | You explained the problem, discussing its relevance.  You critically investigated the problem, evaluating information from a **broad** **range** of appropriate, acknowledged sources.  You described **detailed** **methods** for appropriate testing to evaluate the product/solution against the design specification. | You have fully explained the use of robotics in one or more areas of society and have mentioned others. You have made well-considered predictions of the future possibilities.  You have thoroughly explained all the input/output devices of the Mindstorms kits as well as demonstrated a good understanding of the software.  You have thoroughly researched SumoBots, from several sources, and discussed possible design ideas.  You have completed a detailed design specification and described how to test the success of your sumo robot designs.  You have competed a bibliography and have justified you choice of sources. |