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| **Prac7****Physics Practical** |
|  | P:\Drayton Logo\Drayton Manor logo filled 2014.JPG**Y13 Core Practical****Simple Harmonic Motion** |
| Skills Assessed | Met? |
| 2. Applies investigative approaches and methods when using instruments and equipment | a. Correctly uses appropriate instrumentation, apparatus and materials (including ICT) to carry out investigative activities, experimental techniques and procedures with minimal assistance or prompting.  |  |
| b. Carries out techniques or procedures methodically, in sequence and in combination, identifying practical issues and making adjustments when necessary. |  |
| c. Identifies and controls significant quantitative variables where applicable, and plans approaches to take account of variables that cannot readily be controlled.  |  |
| d. Selects appropriate equipment and measurement strategies in order to ensure suitably accurate results.  |  |
| 4. Makes and records observations | a. Makes accurate observations relevant to the experimental or investigative procedure.  |  |
| b. Obtains accurate, precise and sufficient data for experimental and investigative procedures and records this methodically using appropriate units and conventions.  |  |
| 5. Researches, references and reports | a. Uses appropriate software and/or tools to process data, carry out research and report findings.  |  |

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| Introduction |
| In this investigation you will conduct an investigation into simple harmonic motion using a mass-spring system and a simple pendulum.  |
| Equipment – SHM* pendulum bob
* approximately 1.5 m string or thread
* two small wooden blocks to clamp the string
* stand, boss and clamp
* pin and Blu-Tack to use as fiducial mark
* metre ruler
* stopclock (reading to 0.01 s)

Equipment – Mass-spring* helical spring
* 100 g slotted mass hanger
* 100 g slotted masses
* stand, boss and clamp
* pin and Blu-Tack to use as fiducial mark
* metre ruler
* stopclock (reading to 0.01 s)
 | MethodYou need to plan and carry out two methods to investigate SHM. One will calculate the value of g using a simple pendulum, and the other the value of k using a mass-spring system. **Both should be graphical**.  |
| Relevant equations:Simple pendulum; Mass-spring system;  |