# Lesson Plan

| Teacher: | | Subject: ICT | | Date: |
|---|---|---|---|---|
| Group: | Ability: | Boys: | Girls: | Exam Accreditation: |
| SEN: | EAL: | G & T: | FSM: | Support Staff: |

**Context for Learning**
As part of the WJEC GCSE ICT controlled assessment, students are expected to create a spreadsheet to enable a club manager to work out who has the most points for different categories. The results of this are used to decide who receives the trophies at the club's presentation evening. In order to practice the skill required for the controlled assessment, students will take it in turns to complete Time Trials around a specified circuit using Mario Kart on the Nintendo Wii. The students will compile the raw data generated by the class and input these into a suitable spreadsheet. The students will then use basic and advanced skills to improve the look and functionality of the spreadsheet (This will be based on the assessment criteria for the controlled assessment).

| Learning objectives (the intended learning) |
|---|
| ◉ Use basic skills to build a spreadsheet model |
| ◉ Use advanced skills to enhance a spreadsheet model |
| ◉ Understand how Macros can improve the functionality of a spreadsheet model |

| Learning Outcomes (how learning / progress will be demonstrated) | |
|---|---|
| All | Will create a spreadsheet model, using basic formatting skills, to record the results of the Time Trials and Grand Prix which includes at least one graph. |
| Most | Will use formula to work out the Fastest, Slowest and Average lap times and use advanced skills, such as Macros & VLOOKUP, to enhance the spreadsheet model. |
| Some | Will perform at least one 'What If' investigation and explain how Macros can improve the functionality of a spreadsheet model. |

☐ Literacy      ☐ Peer/self assess      ☐ SMCS
☐ Numeracy      ☐ AfL      ☐ ECM
☐ ICT      ☐ LSA      ☐ PLTS

| | Timing | Student activity | Differentiation |
|---|---|---|---|
| Settling starter / Learning starter | 5 mins. | Students to recap functions such as SUM, MAX and MIN. Students, in teams, to build the correct formula for a set of questions displayed on the board using a set of given cards. | ACCESS<br><br>CHALLENGE |
| Main | 50 mins. | **Task 1:** Students to continue building their spreadsheet model to record the results of the Grand Prix and Time Trials. Students to use formula to work out the Fastest, Slowest and Average lap times.<br><br>Students to create at least one graph and enhance the functionality of their spreadsheet by including Macro buttons.<br><br>**Teacher Provision:** Demonstrate how to enable the developer panel and create macros in Excel.<br><br>Explain to students the marking criteria for the next controlled assessment and introduce them to the main task and show example (WILF). | ACCESS<br><br><br><br><br>CHALLENGE |
| Plenary | 5 mins. | Ask students what new skills they have learned and what they need to do to improve their work (based on the self-assessment sheet). Ask higher ability students what are the benefits of using macros. | ACCESS<br><br>CHALLENGE |
| Extension | | Students to create a LOOKUP table and change the data in their spreadsheet to perform at least one 'What If' investigation. | |
| AfL | | Questions I am going to ask to introduce and informally assess each of my learning objectives<br><br>**Q1.** What Data can be changed in the spreadsheet in order to perform a 'What If' investigation? ***Possible answer:*** *Change the points awarded for $1^{st}$, $2^{nd}$ and $3^{rd}$.*<br>**Q2.** What are the benefits of using Macro buttons? ***Possible answer:*** *Makes the spreadsheet model easier to use (user friendly) especially for those who have never used a spreadsheet package before. Also people are more accustomed to using buttons in everyday life e.g. websites, games, mobile phones etc.* | |
| HWK | | | |
| Resources | | Nintendo Wii (4 Controllers); Spare batteries; Digital Still Camera (To record results of each race); Record Sheets; Help guides / videos; Stock Images; Modelling Mario Example. | |