## Grade 12 Content List

## A rough gridline to marking:

| Level 1+2 | Level 3 | Level 4 | Level 4+ | Level 4++ |
| :--- | :--- | :--- | :--- | :--- |
| Implemented | Useful, but <br> simple <br> implementations. | Critical part of game, <br> complex <br> implementation. <br> Part of the given <br> instructions. | Complex implementation, <br> not part of given <br> instructions. | Extremely complex. <br> Coded independently (not <br> with other students and not <br> with Ms. Gorski's help). | | Coded independently (not |
| :--- |
| with other students and |
| not with Ms. Gorski's |
| help). |

Several of the early levels can add up to higher levels. 4++ only needs to occur once.

15 Puzzle=15, 4Pics1Word=4P, Boggle=B, Hnefatafl=H, Minesweeper=M, Othello=O, Peg Game=PG, Wordle=W
Aim for about 2-3 items. * Indicates Higher Complexity.

|  |  | Examples | Your Use | Automatic (if working) |
| :---: | :---: | :---: | :---: | :---: |
| 1 | Widgets | New Widgets used Sound added |  |  |
| 2 | Array Manipulation Neighbour | Extra Grid added (two grids) Clever new game function added independently. <br> 3D Array for Undo. <br> High Scores List |  | 15 - Moves 4 directions B - Selects word H - Kill opponent M - Open, Neighbours O\&PG - Move 8 directions |
| 3 | Sort <br> Swap | Bubblesort, Quicksort used (maybe in High Scores List? Or a Past Players List?) |  | - 15-Swap <br> - H-Swap to place <br> - PG - Swap |
| 4 | Methods ORATE * | Own method, has parameter Own method, has return type <br> Reusability to set up widgets |  |  |
| 5 | Files Search | Save/Open <br> To read in levels |  | B - Dictionary (open only) <br> W - Dictionary (open only) |
| 6 | Recursion | Binary Search Number generation using recursive methods |  | - M-Open <br> - B\&W - If switch dictionary search to recursive |
| 7 | String | Length, charAt, indexOf, toUpperCase, trim |  | 4 - TextField  <br>  B - Building Word <br> W -Answer Check  |
| 8 | Objects | Creation of an Object Dice or Word or Answer or Hint |  | [ 4-word <br> - W-word |
| 9 | $\begin{aligned} & \text { ADTs } \\ & \star * \end{aligned}$ | Using Stack or Queue |  |  |
| 10 | Android | Intents used <br> Android widgets used |  |  |

