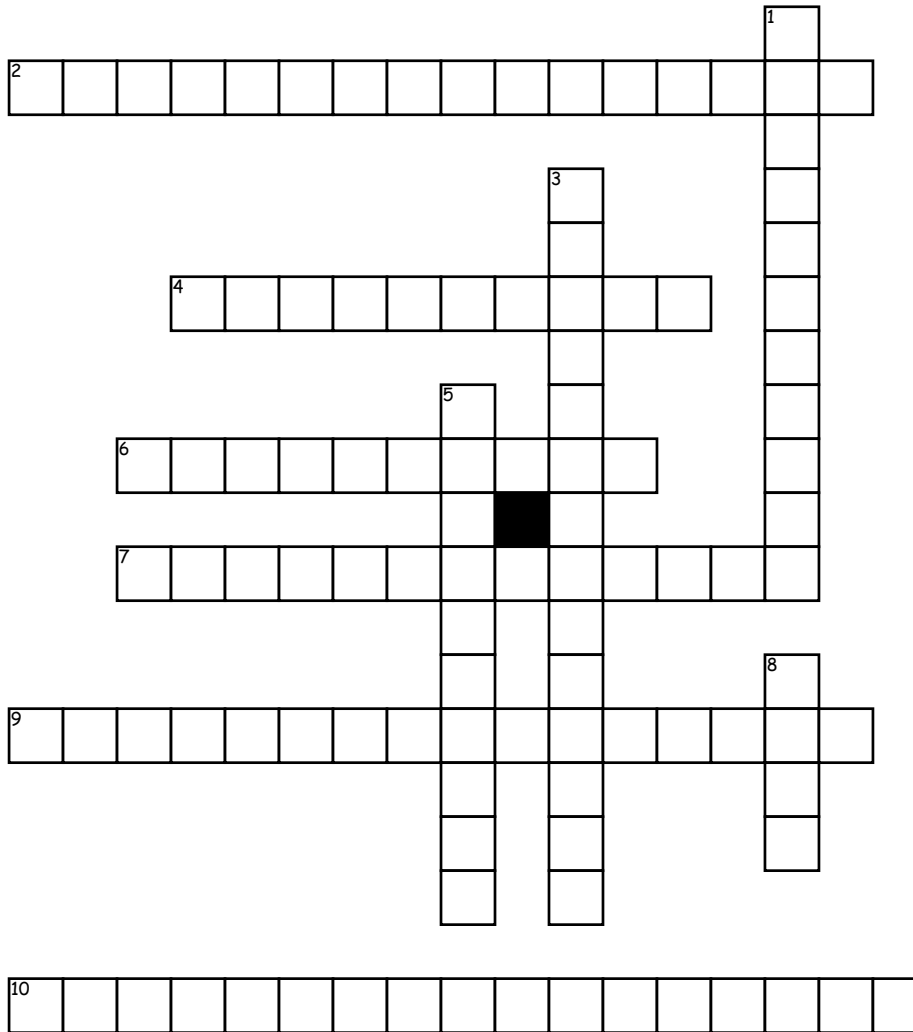


Abstraction Types



Across

- 2. This is when a problem is reduced into its simplest components with the aim of relating them to similar problems with existing solutions that could be applied in this similar circumstance.
- 4. This focusses on common functions that can be used to solve the problem and the computational method is hidden.
- 6. This abstracts away the actual values used in the computation leaving just a representation of a computational method, a generalised description of the method
- 7. The process of breaking a problem into a number of sub-problems, so that each sub-problem accomplishes an identifiable task, which might itself be further subdivided.
- 9. This is a representation that is arrived at by removing unnecessary details.

- 10. The process of hiding all details of an object that do not contribute to its essential characteristics, allowing access to the object only via an interface with the internal workings of the object being hidden.

Down

- 1. The process of creating the algorithms for the procedural abstractions, writing the code, implementing the necessary data structures and then linking them all together to form a working system.
- 3. This is when we group items by common characteristics to arrive at a hierarchical relationships of the 'is a kind of' type.
- 5. The process of solving problems by creating models of the situation and turning it into a form that can be processed by a computer.
- 8. This involves hiding the details of how data is actually represented and separating from this the logical properties of data.

Word Bank

- | | | | |
|------------------|--------------------|------------|-------------------|
| Representational | Information Hiding | Functional | Problem reduction |
| Data | Automation | Procedural | Composition |
| Generalisation | Decomposition | | |