



Objects as a programming concept

IB Computer Science



*Content developed by
Dartford Grammar School
Computer Science Department*



HL Topics 1-7, D1-4



1: System design



2: Computer Organisation



3: Networks



4: Computational thinking



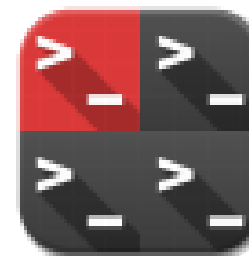
5: Abstract data structures



6: Resource management



7: Control



D: OOP

HL & SL D.2 Overview

D.2 Features of OOP

- D.2.1 Define the term encapsulation
- D.2.2 Define the term inheritance
- D.2.3 Define the term polymorphism
- D.2.4 Explain the advantages of encapsulation
- D.2.5 Explain the advantages of inheritance
- D.2.6 Explain the advantages of polymorphism
- D.2.7 Describe the advantages of libraries of objects
- D.2.8 Describe the disadvantages of OOP
- D.2.9 Discuss the use of programming teams
- D.2.10 Explain the advantages of modularity in program development



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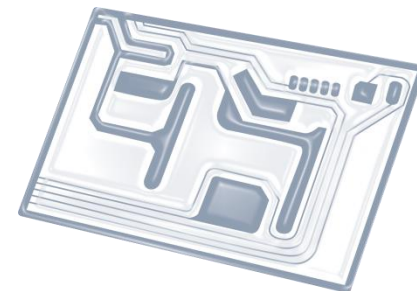


7: Control

D: OOP

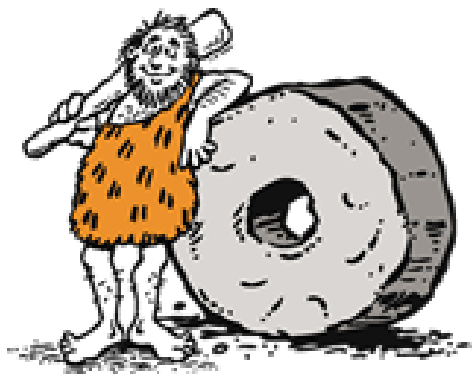


Topic D.2.7



Describe the **advantages** of **libraries** of objects

WHY REINVENT THE
WHEEL WHEN YOU
DON'T HAVE TO?



Biggest advantage: **Time saving!**

- **Sorting algorithms** do not have to be re-invented
- **Complex algorithms** and processes can be reused

