



Year 10 IST (2021)

IST Assessment Task Notification

Software Development and Programming

Type:	Theory / Practical Task
Weighting:	20%
Topics:	Option Topic 8: Software Development and Programming
Submission Date:	<ul style="list-style-type: none">Term 2 (Week 3A) Friday 7th May 2021
Resources:	<ul style="list-style-type: none">Information and Software Technology Text BookClass Theory, Practical Lessons and DemonstrationsScratch Reference Guide and PowerPoint Presentations on Resources Share and Google ClassroomAlgorithms Booklets (Theory and Task Booklet)
Submission Details:	<p>If you are absent from school on the date this task is due, a medical certificate is required to be handed in to your class teacher or the head teacher on the <u>first</u> day you return to school.</p> <p>Requests for extensions must be made <u>before</u> the due date and accompanied by a medical certificate.</p>
Marking Criteria	<ul style="list-style-type: none">Marking criteria are provided at the end of this notification.All work must be your original work, citing any resources or websites utilised.Computer or printer failure will not be accepted as an excuse for late or non-submission.Trivial attempts will be counted as a non-attempt and may result in an official warning letter being issued.
Task Notification:	Ensure that you have signed and dated the Task Notification Log.





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Assessment Topics and Outcomes

The following table lists all the Stage 5 IST topics (Core and Option) and outcomes.
Topics and outcomes appearing in **bold** will be assessed in this task.

Core Topics

1. Design, Produce & Evaluate
2. Data Handling
3. Hardware
4. Issues
5. Past, Current & Emerging Technologies
6. People
7. **Software**

Option Topics

1. Artificial Intelligence, Simulation & Modelling
2. Authoring & Multimedia
3. Database Design
4. Digital Media
5. Internet & Website Development
6. Network Systems
7. Robotics & Automated Systems
8. **Software Development & Programming**

5.1.1 Selects and justifies the application of appropriate software programs to a range of tasks.

5.1.2 Selects, maintains and appropriately uses hardware for a range of tasks.

5.2.1 Describes and applies problem-solving processes when creating solutions.

5.2.2 Designs, produces and evaluates appropriate solutions to a range of challenging problems.

5.2.3 Critically analyses decision-making processes in a range of information & software solutions.

5.3.1 Justifies responsible practices and ethical use of information and software technology.

5.3.2 Acquires and manipulates data and information in an ethical manner.

5.4.1 Analyses the effects of past, current and emerging information and software technologies on the individual and society.

5.5.1 Applies collaborative work practices to complete tasks.

5.5.2 Communicates ideas, processes and solutions to a targeted audience.

5.5.3 Describes and compares key roles and responsibilities of people in the field of information and software technology.





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Task Resources:

In conjunction with class demonstrations and lesson content delivered, the resources you require to successfully complete this task have been made available on Resources Share and our Google Classroom. Resources include:

- Algorithms Work Booklet (Hardcopy previously issued)
- Algorithms Task Booklet (Electronic Copy to be completed and submitted via Google Classroom)
- Scratch Resources: Reference Guide, Presentation and Scratch Cards
- Heinemann and Pearson IST text books (Chapter 15)

Task Requirements:

This task is a combined theory/practical task. You will be required to submit a soft copy (via Google Classroom) of the task booklet with screen captures of your responses and Scratch practical work inserted (pasted in).

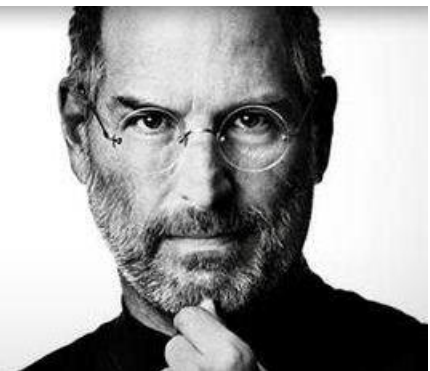
Components include:

- Algorithm Basics
- Control Structures
- Multiple Choice Questions
- Algorithm Description
- Scratch Screen Captures
- Maze Coding Challenge



**Everybody in this country should
learn to program a computer...
because it teaches you how to think**

Steve Jobs, Co-founder and CEO of Apple Inc. (1955 - 2011)





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Name: _____

Task Marking Criteria:

Marks

Task booklet submitted via Google Classroom	Yes or No
Hard copy of task booklet handed in to class teacher	Yes or No
Algorithm Basics	/ 10
Control Structures	/ 12
Multiple Choice Questions	/ 12
Algorithm Description	/ 30
Scratch Screen Captures	/ 12
Maze Coding Challenge	/ 14
Total	/ 90

Teacher Feedback:

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