

## Knowledge Organiser

# Artificial Intelligence

## Key Vocabulary



Term	Definition
Artificial Intelligence	The ability of a computer or machine to perform tasks that typically require human intelligence.
Sensor	A device that detects and responds to input from the physical environment.
Input	Data or information that is fed into a system for processing.
Process	The method by which a system analyses input data to produce an output.
Output	The result produced by a system after processing input data.
Detect	To discover or identify the presence of something.
Component	A part or element of a larger system.
Automatically	Performing a task without human intervention.
Machine Learning	A subset of AI that allows systems to learn from data and improve over time.
Algorithm	A step-by-step procedure for solving a problem or completing a task.
Data	Facts and statistics collected for reference or analysis.
Programming	The process of designing and building executable computer software to accomplish a specific task.

## Key Concepts

- **Artificial Intelligence:** Understanding what AI is and its role in technology today.
- **Input, Process, Output:** The relationship between these three elements in AI systems.
- **Sensors:** How sensors gather data and their importance in AI applications.
- **Machine Learning:** The concept of AI systems learning from data and improving their performance over time.
- **Components of AI:** Identifying the different parts that make up an AI system and how they work together.
- **Real-World Applications:** Examples of AI in everyday life, such as virtual assistants and recommendation systems.
- **Designing AI Systems:** Basic principles for creating a simple AI system, including defining its components and functions.