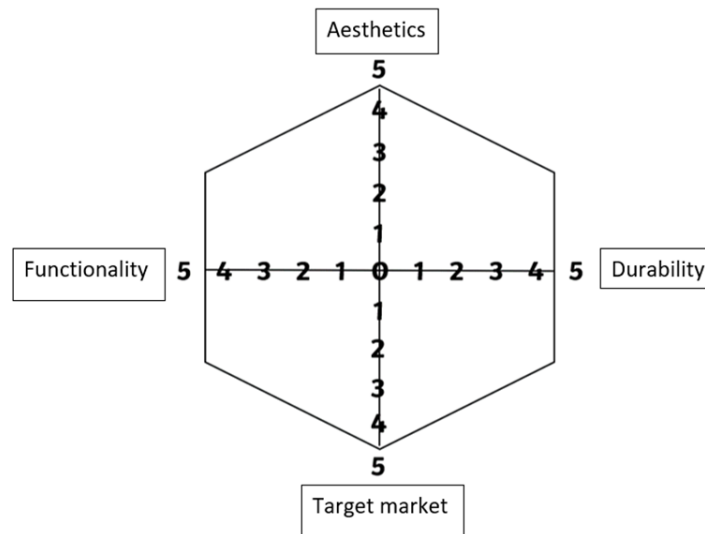| Year: 6	Construction (with an electrical system)	DT

Vocabulary:

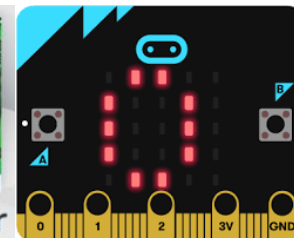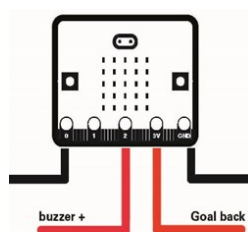| Code	The set of instructions forming a *computer* program which is executed by a *computer*.
Debug	Identify and remove errors from computer hardware or software.
Microcontroller	A small computer which is dedicated to perform one task and execute one specific application.
Exploded diagram	A diagram showing individual components of a given product.
CAD	Computer aided design—using computing to support the design process.
Programmable	When a computer or other machine is able to be provided with coded instructions for the automatic performance of a task.
Functionality	The quality of being suited to serve a purpose well.
Complete circuit	A complete (closed) circuit makes electrical current flow possible.
Innovative	When a product does not duplicate anything on the market.

Design Brief:

Code powers our digital world. Every website, smartphone app, computer programme, calculator and even microwave relies on code in order to operate. This makes coders the architects and builders of the digital age. Over the next 10 years it is estimated that there will be 1.4 million jobs in computer sciences.

You are challenged to design (using CAD and Microbits) and make an innovative and engaging game aimed at a target market of your choice. It needs to be structurally sound, unique, and function accurately.

STAR Evaluation:

Key Figure:

WOMEN IN TECHNOLOGY
ADA LOVELACE

buzzer +   Goal back

Microcontroller