

# Flying Start Challenge



## Materials In Engineering – Teacher Guide

**AIRBUS**

**ATKINS**  
Member of the SNC LevelIn Group

**BAE SYSTEMS**



ROYAL NAVY  
**FLEET AIR ARM**  
MUSEUM

**GKN** GKN AEROSPACE

**LEONARDO**  
HELICOPTERS

**MBDA**  
MISSILE SYSTEMS



**SAFRAN**

# Mark Scheme

Metal	Plastic	Ceramic	Natural
Aluminium	UPVC	Glass	Timber
Gold	Nylon	Bone China	Limestone
Iron	Acrylic	Porcelain	Silk
Mercury	ABS	Zirconia	Bamboo

Score: /12

For the second table, the student will be awarded a mark for each pair of material and relevant application they complete. (Maximum of 4 marks)

Score: /4

## **Practical Activity:**

Each aspect of the students' work (Method/Plan, Result tables/charts, Conclusion, Justification of material) is worth up to three marks.

1 mark - Student has provided a poor level of detail in written aspects of the task, failing to use any keywords or terminology. They have not shown much understanding and are unable to explain the results of their tests.

2 marks - Student has provided a good level of detail in written aspects of the task, using some relevant terminology and demonstrating a good level of understanding. They are able to explain some of the results from their tests and provide some justification of their decisions.

3 marks - Student has provided a high level of detail in written aspects of the task, using correct terminology and demonstrating a high level of understanding. They are able to explain the results of each test and fully justify their decisions quoting data from their experiments.

Score: /12

Total score: /28

