



# Science & Technology Competition 2026 Challenge!

## Flight!

### Design Brief

- 1) The aim is to design and make a **hand launched** unpowered free flight aircraft that can keep a standard size Lego figure in the air for the longest time.
- 2) The aircraft must be self-assembled. Commercially made models will not be accepted nor will any form of remote control or power plant. Individual parts of the plane may consist of manufactured pieces e.g. propellers or rotors, but commercially made planes or part planes will not be accepted. Construction kits i.e. Lego, Knex, Meccano may be used.
- 3) The aircraft will be flown indoors, a soft landing area will be provided to ensure re-use.
- 4) The aircraft will be launched from a set height by hand. This will be from a raised podium and the height of the launch operator will be accounted for.
- 5) The launcher will be allowed 3 flights and the longest flight will be recorded. The flights will be timed from launch until landing. The presiding Flight Inspector (nominated by each participating school) will time this. Their decision and timings are final.
- 6) The finished aircraft must **not be**:
  - a) Longer than 100 cm.
  - b) Wider than 100 cm.
  - c) Higher than 100 cm.
  - d) Not weigh more than 1kg
  - e) Utilise lighter than air gasses (eg balloons)
  - f) Powered.
  - g) Put the safety of spectators and the Lego pilot/passenger at risk.
  - h) Lego pilot/ passenger **MUST** wear a helmet.

The above will be subject to the scrutiny of the Flight Inspector before being permitted to compete.

- 7) The competitors will be timed as above and the winners ranked and awarded certificates in their schools. The winning entry will be invited to compete against the winners of the other school events in a grand final. The winner taking home the Flight Trophy.

Ideas could include, gliders, rotor craft and parachutes.

There will also be awards for the most innovative and well-presented designs.

Launch assemblies from **May 5th**

Deadline for entrants and school heats to begin **June 29th**

Grand final at Jesse Gray School 1pm **July 16th**

May I take this opportunity to wish you every success with your entry. I look forward to seeing the aircraft in flight! Happy designing and happy building,

**Mr Belton** (Headteacher – Jesse Gray Primary School)