RAF Museum London Air Cadet Quiz

Welcome to the RAF Museum London. Our Museum tells the story of the RAF from its formation during the First World War through to today and even looking to the future.

Your challenge is to visit each of our Hangars and find the answers to as many of the questions as possible. You will be competing against your fellow cadets so search carefully. Most of the answers can be found in the Museum, however for some of the answers you may need to use some of your own knowledge and skills.

There is a bonus selfie and picture challenge so check this before you begin to make sure you don’t miss an opportunity for points.

Good luck!

Bonus point selfie challenge (6 points)

☐ Wearing a uniform from Hangar 1  ☐ With an emergency vehicle
☐ With a biplane  ☐ Using an interactive exhibit
☐ With an aircraft used by Air Cadets  ☐ In an aircraft

H1

1  In what year was the RAF formed?
   Bonus point: who was the first head of the RAF?

2  What percentage of RAF personnel work in Engineering?

3  What is the most powerful weapon in the bombing area?

4  The Gnat is the predecessor of the BAe Hawk used by which display team?

5  Which kind of engine is attached to a Gnat? Hint... it isn't a piston engine.
   Bonus point: name the four stages that describe how this type of engine works.
6 Which aircraft in Hangar 1 has a Royal connection? Bonus point: name the Royal.

7 What is the RAF’s newest aircraft? Bonus point: give an example of what makes it so advanced.

8 What is the RAF’s unmanned aircraft called?

9 What does ISTAR mean?

10 Name two tasks that can be carried out by a drone.

11 Fast aircraft need to be aerodynamic. Take a look at the wind tunnel models and designs. Sketch out what the cross-section of a high-speed wing could look like. Hint: the cross-section is what the wing would look like if viewed from the side.

12 When designing aircraft, engineers have to take into account the four forces of flight. What are they?

13 The largest aircraft in Hangar 1 does not operate from airfields. Where would it operate from? /17 points
1. As well as being used as fighters and bombers, what was the other major role assigned to aircraft in the First World War?

2. What were the main materials used to construct aircraft at this time?

3. Until the use of aircraft radios, how would pilots be able to send messages to those on the ground without the need to land?

4. The RAF was formed by combining two flying services. What were they?

5. What is unusual about the propeller location on the FE2b aircraft?  
Bonus point: why is it there?

6. What was the name of the device that made fighter aircraft more accurate by allowing machine guns to fire through the propeller?

7. What was this building used for during the First World War?

/8 points
Find the helicopters that when fully built has the largest number of rotor blades. What is it called and how many rotor blades should it have?

Which three countries are represented by the ‘fighter four’ aircraft from the Battle of Britain?

Why do many people believe the Hawker Hurricane should be more highly credited than the Supermarine Spitfire?

The Lancaster bomber was one of the RAF’s primary bombers during the Second World War.

What do the Lancaster and Spitfire have in common?
9 How many missions did our Lancaster fly?

10 The Lancaster was used in the Dambusters mission to destroy German dams. What was special about the bombs used for this mission?

11 The following images give clues to the aircraft in Hangar 5. Name the aircraft.

Head to the Avro Vulcan and appreciate its enormity. It is the largest bomber ever used by the RAF.

12 This aircraft was one of the three V-force bombers used by the RAF during the Cold War. Name the other two.

13 In what conflict was air to air refuelling used to increase the Vulcan's range?

Go back through to Hangar 3.

14 What is this aircraft?
   Bonus point: which Air Race did the aircraft displayed win?

15 At the exit to Hangar 3 is the English Electric Lightning. The last Supersonic British-built fighter aircraft. How fast could it go?
1. The Tornado by the entrance has a wing design that enables it to transition from low to high speed flight. What can the wings do that enable this?

2. Name three aircraft in this building still in service for the RAF.

3. When was the Chinook helicopter first introduced?

4. Why are the wings on the Hercules set high on the fuselage?

5. What was special about the Harrier aircraft?

6. Find the black aircraft. What is it and why is it painted black?

/6 points

Total out of 55