



SCOUT AIR RESEARCHER ACTIVITIES BADGE



Name:

Pack:



Requirement 1

Research One Historical Aspect of Flight and share what you find out with the Troop

Requirement 2

Visit an Air Museum

By visiting the RAF Museum, Cosford you have completed Requirement 2 of your Air Activities Badge

Activities whilst visiting the Royal Air Force Museum

Activity 1A: Parts of an Aeroplane

Correctly label the aeroplane diagram below with the following terms:

Fuselage – the body of an aeroplane

Wing – the part which supports the aeroplane when flying

Tailplane – small horizontal wing at the tail of the aeroplane

Fin – the upright surface on the tail

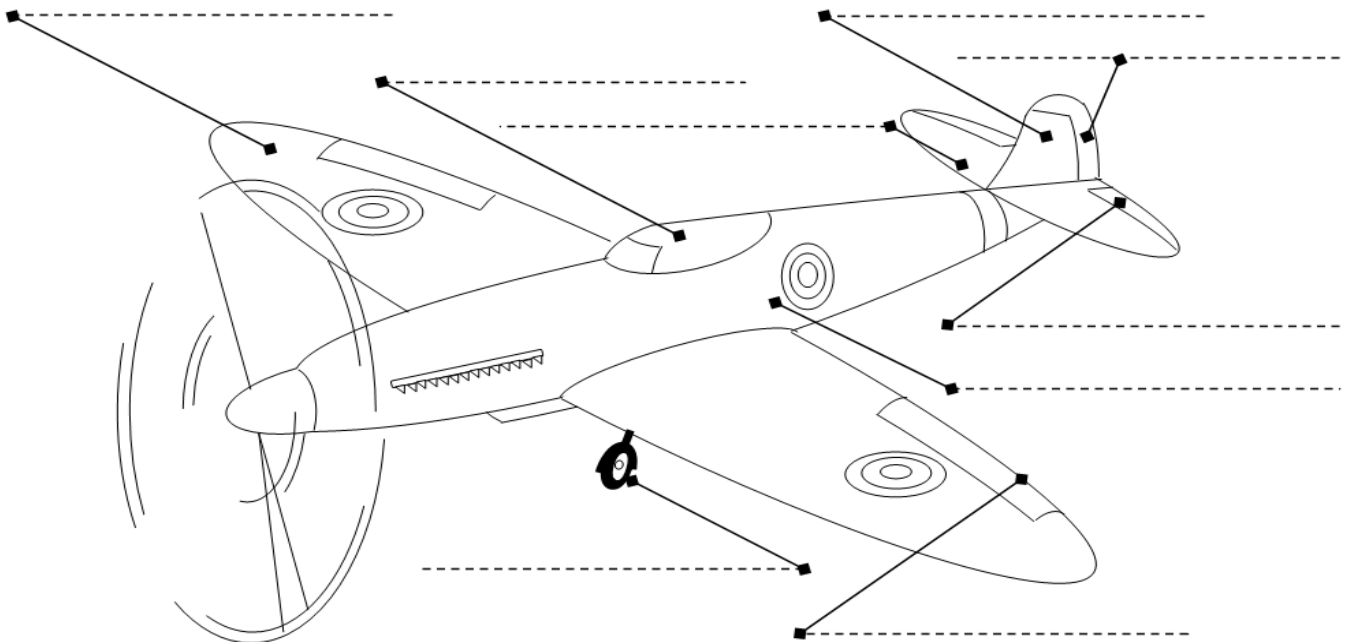
Rudder – hinged rear part of the fin which helps the pilot to steer

Aileron – hinged rear edge of the wing

Elevator – hinged rear part of the tailplane

Undercarriage – the landing gear and wheels

Cockpit – where the pilot sits



Activity 1B: Identifying Aircraft

Find examples of the different types of aircraft listed below:

All flying machines are **aircraft**.

Aircraft can be **lighter** than air or **heavier** than air.

Balloons and **airships** are filled with gas or hot air which is lighter than the air around them.

Giders use rising currents of air to stay up.

Aeroplanes use the shape of their wings to obtain lift.

Some aeroplanes have more than one set of wings.
One set of wings is a **monoplane**.
Two sets of wings is a **biplane**.

Helicopters have **rotary wings** which lift the aircraft by whirling round.

Fill in the name of an aircraft in the Museum that is an:

Airliner _____

Biplane _____

Monoplane with propeller _____

Twin engined aeroplane _____

Jet-propelled aeroplane _____

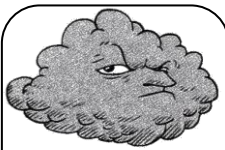
Helicopter _____

Flying Boat _____

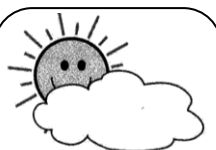
Four engined aeroplane _____

Activity 1C: Weather and Flight

Match each weather condition to the correct statement about flight



Thick Fog



Warm Sun



Temperature below freezing at ground level



Thunder and Lightning



Very Strong Winds



Snow

Perfect for gliding

De-ice aircraft before flight

Wait for improved visibility before taking off

Clear runway before aircraft land or take off

Ideal conditions for ballooning

Bumpy conditions for flight