



**BUILD & FLY
ADVENTURER AWARD**

WHO AM I?



Requirements



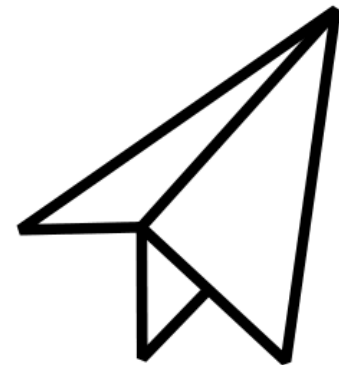
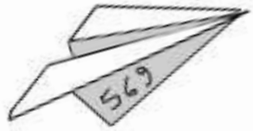
- 1: *Make a paper airplane and fly it.*
- 2: *Make a simple glider and fly it.*
- 3: *Make a simple kite, fly it, and explain the safety rules.*
- 4: *Observe four different animals that fly and tell how they fly.*
- 5: *Draw a picture of your favourite flying animal.*
- 6: *Know where the Bible speaks of an angel flying.*
- 7: *Know who the first successful motorised airplane pilot were.*
- 8: *Work a crossword puzzle about types of flying.*

What is the difference between an airplane & a glider?

**Planes have engines
gliders do not
have engines.**



Requirement 1&2: make a paper airplane and glider & fly it



Requirement 3: Make a simple kite, fly it, and explain the safety rules.



Safety when flying Kites

True or False

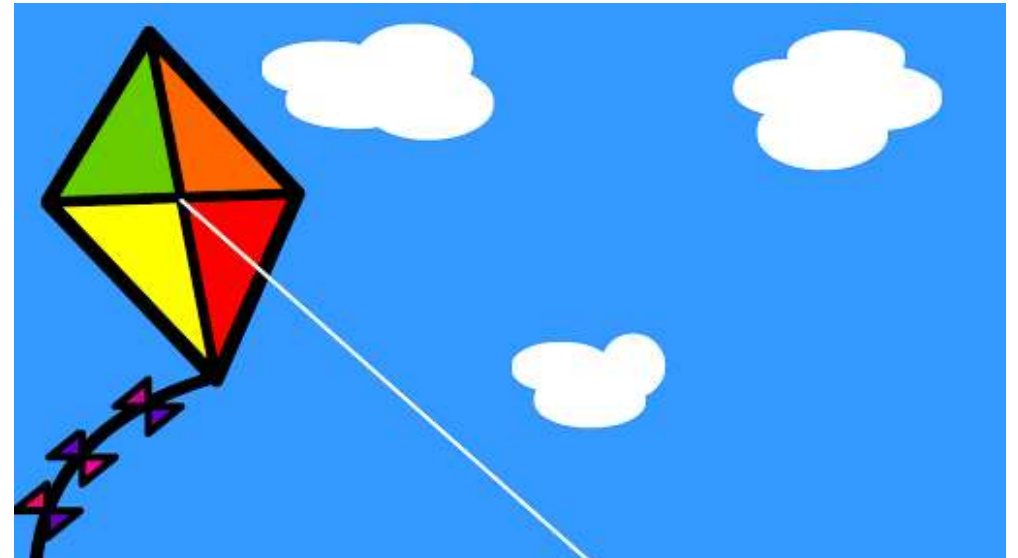
You must always fly your kite during wet and stormy weather

You must always fly your kite in open space

If your kite gets stuck in a powerline you **MUST** rescue it

You must wear gloves when flying your kite

You can fly your kite near roads or paths



Requirement 3: Make a simple kite, fly it, and explain the safety rules.



Safety when flying Kites

True or False

You must always fly your kite during wet and stormy weather

F

You must always fly your kite in open space

T

If your kite gets stuck in a powerline you MUST rescue it

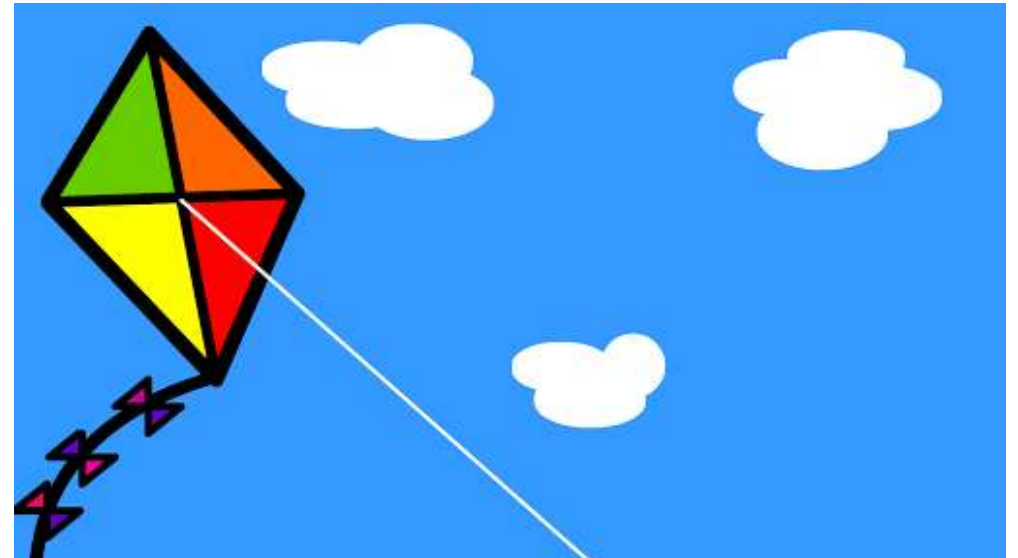
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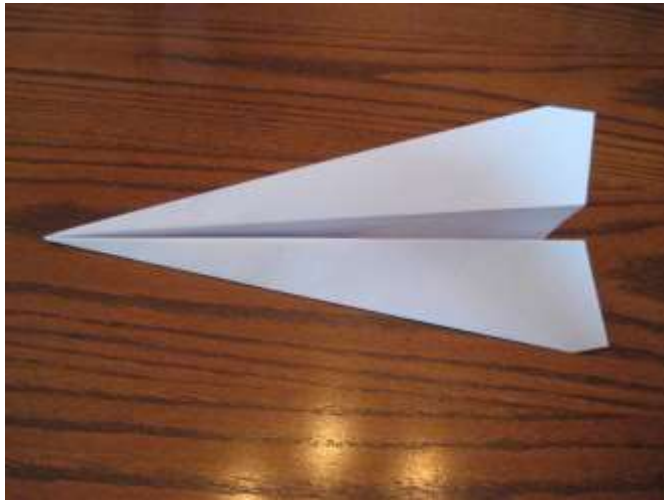
You must wear gloves when flying your kite

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You can fly your kite near roads or paths

F





Don't forget to send your paper plane and glider pictures to dejan@adventist.uk



You will see 4 different animal,
you have to guess if that animal

flies

or

glides.



ANIMAL

1

GLIDES

Flying squirrel



Found in Mexico and central America

They have a parachute-like-membrane, allowing them to glide.



ANIMAL

2

FLIES

Barn owl



These owls are found on every continent except Antarctica.

They have large wings allowing them to pick up their body weight effortlessly and quietly.



ANIMAL

3

GLIDES

Flying fish



They can be found in the Atlantic and Pacific coast of the USA.

With speed they shoot out of the water and use their long fins called pectoral fins, to glide.



ANIMAL

4

GLIDES

Wallace's flying frog



They can be found in dense tropical jungles of Malaysia and Borneo.

With membranes between their toes and loose skin flaps on their sides. They can parachute over 50 feet or more.



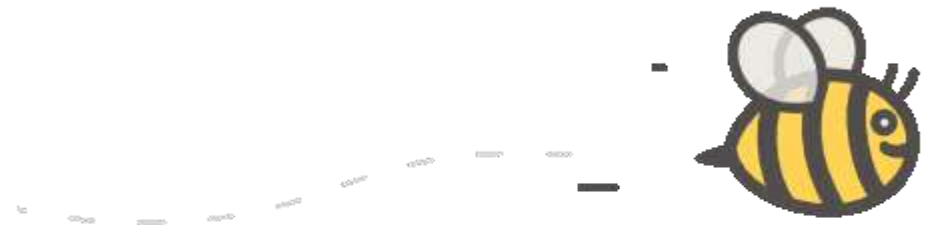
Requirement 4: Observe four different animals that fly and tell how they fly.

Bees



How do Bees Fly?

- Flexible wings that can move in different directions.
- Fast wing beat frequency
- Wings make short, quick sweeping motions



Ladybirds



How do Ladybirds Fly?

- Two sets of wings – but only the back wings beat.
- Outer covering (elytra) swings outwards, letting back wings unfold.
- Wings start beating rapidly then the ladybird launches into the air.

Bats



How do Bats Fly?

- Forelimbs form webbed wings
- Wings are made up of a thin skin called patagium.
- Their thin skinned wings makes them flexible and able to move accurately.

Herring Gulls (Seagulls)



How do Seagulls Fly ?

- They have strong muscles on their chest allowing them to pull their wings down with power.
- They have long wings allowing more air to be trapped creating greater lift.
- Their wings are flexible allowing them to change their wing shape to stabilise their glide.

Requirement 5: Draw a picture of your favourite flying animal.



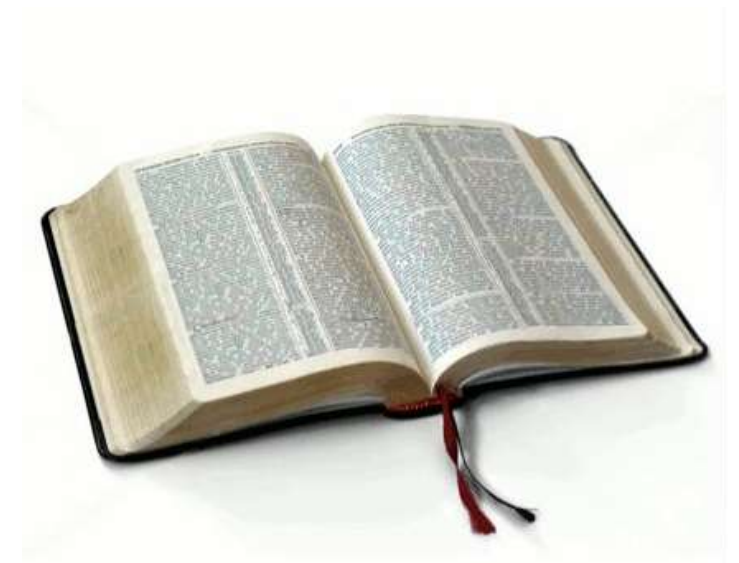
Don't forget to send your pictures to dejan@adventist.uk

Requirement 6: Know where the Bible speaks of an angel flying.



Revelation 14:6 NIV

Then I saw another angel flying in midair, and he had the eternal gospel to proclaim to those who live on the earth – to every nation, tribe, language and people.



Seventh-day Adventist church logo



Did you know that the
SDA logo also
represents the 3 flying
angels?

Seventh-day Adventist church logo



This shape shows a flame-like image encircling a sphere which represents the globe.

These 3 lines, represent the three angels of Revelation 14 circling the globe.

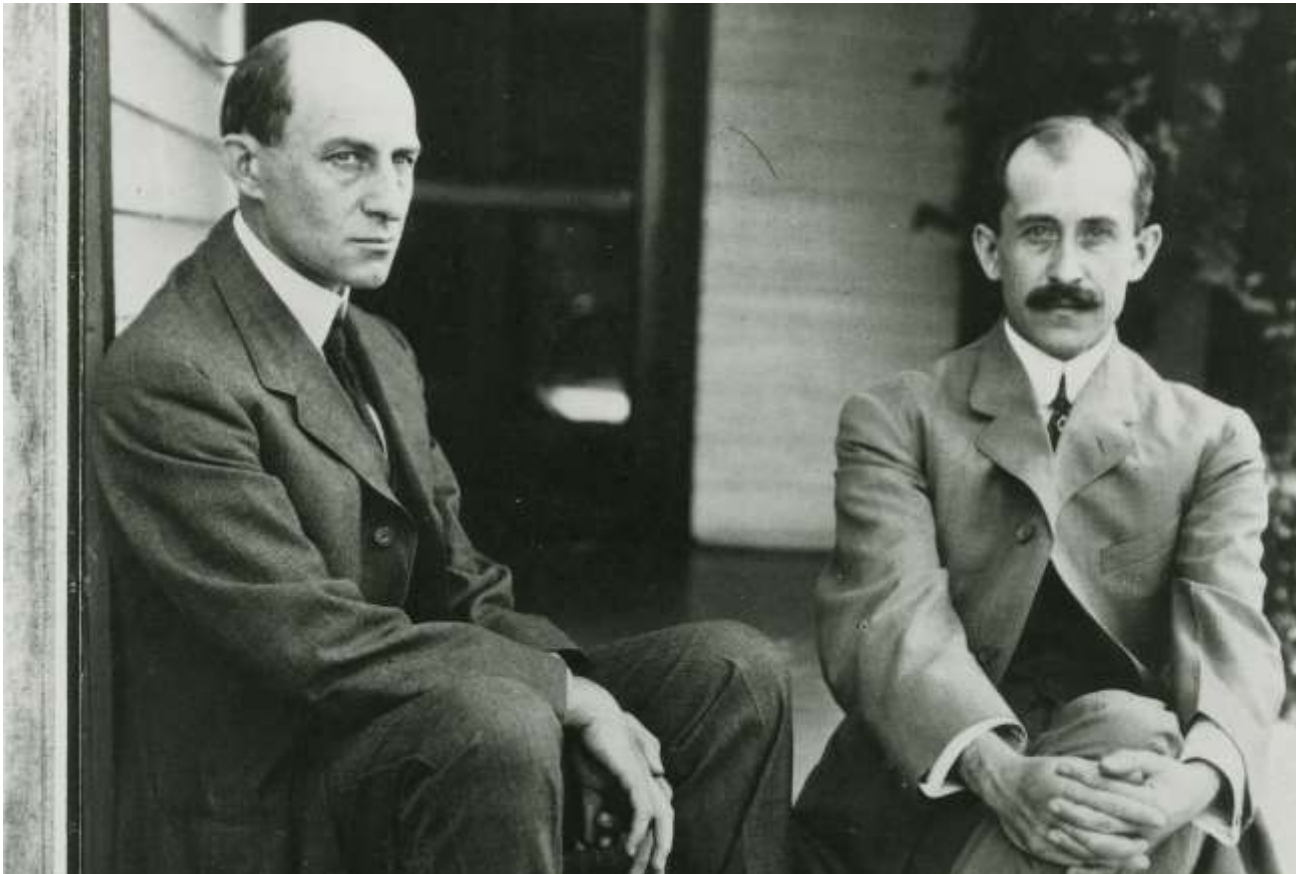
This is telling us that our mission is to spread the gospel to the entire world.



Requirement 7: Know who the first successful motorised airplane pilots were.



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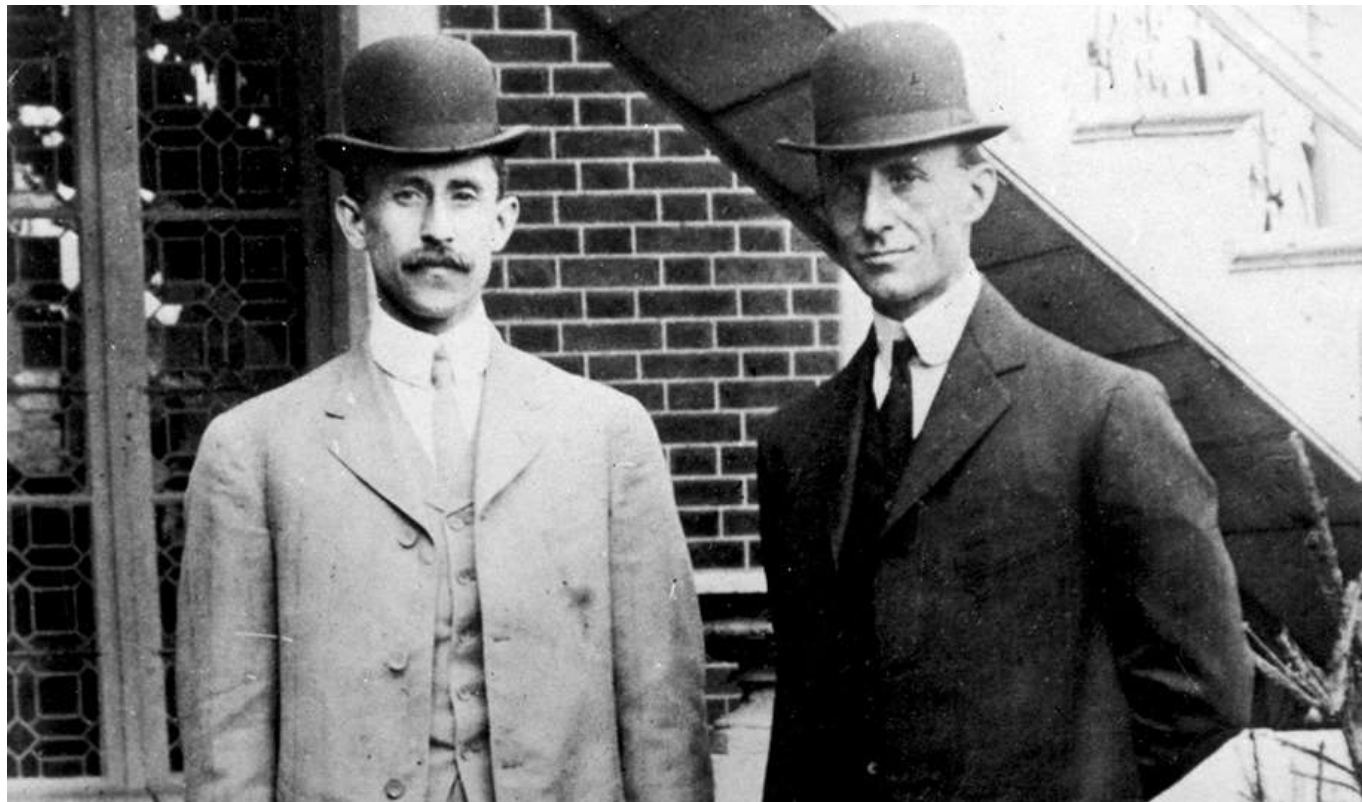
Inventors were:

Orville and Wilbur Wright

Wilburn was born - April 16, 1987, Indiana

Orville was born - August 19th 1871, Ohio

Requirement 7: Know who the first successful motorised airplane pilots were.



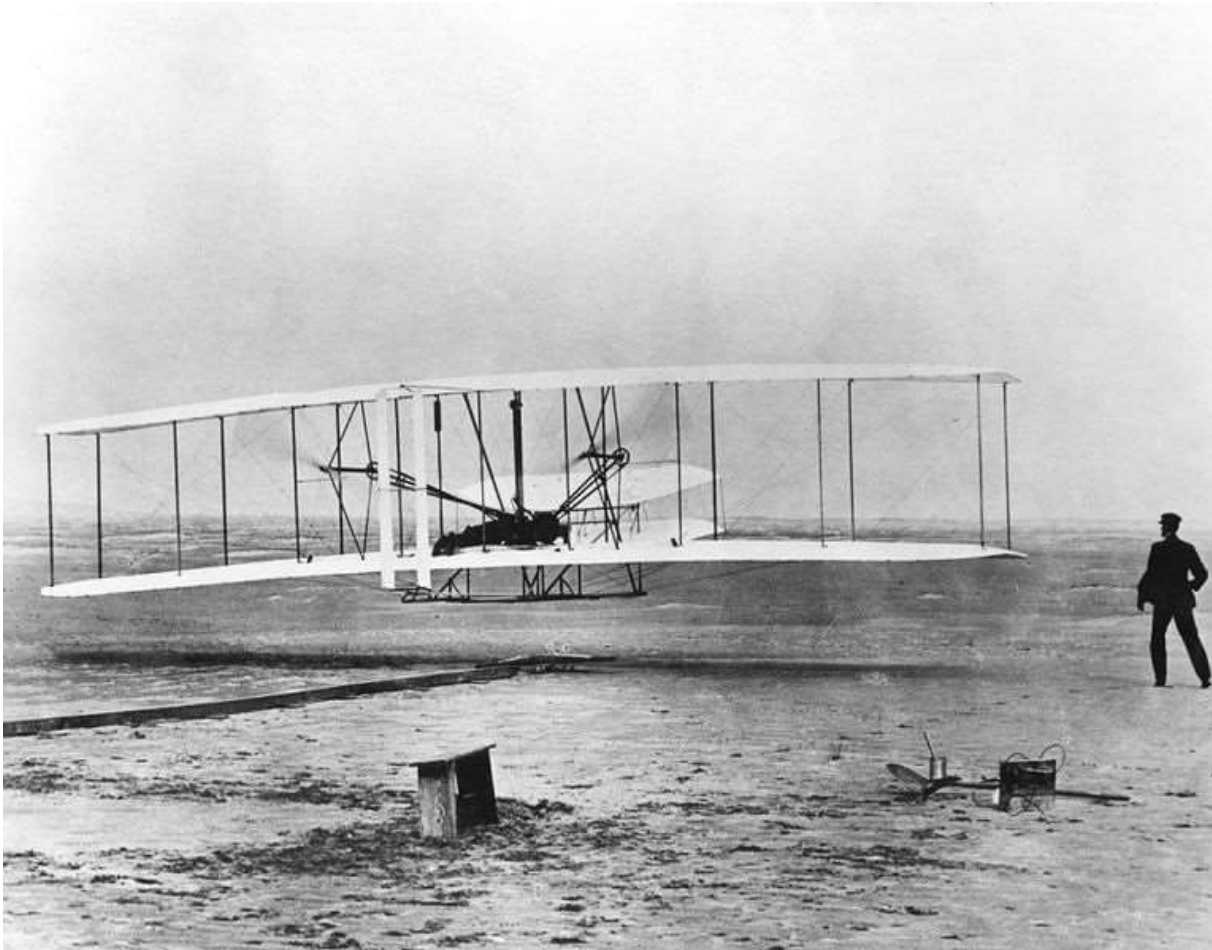
Inventors' inspiration:

The brothers were fans of other pilots and their gliders.

They decided to move to the windy city of Kitty Hawk, North Carolina to develop their own flight designs.

The brother studied how different birds used their wings to soar through the sky and decided to design wings like birds.

Requirement 7: Know who the first successful motorised airplane pilots were.



First time in the air:

December 17th 1903, 10:35am, the brothers ran 3 flight test.

Orville Wright did the 1st flight test lasting 12 seconds.

Wilbur Wright did the 3rd flight test lasting 59 seconds, covering 852 feet

What plane did they use to fly?:

They flew a self-propelled gasoline powered biplane, with 12 horsepower internal combustion engine.

Tutorial video links

Paper plane tutorial:

<https://www.youtube.com/watch?v=veyZNyurlwU&list=LL&index=7&t=0s>

Kite making tutorial:

<https://www.youtube.com/watch?v=eXpMjJHSakg&list=LL&index=5>

Paper glider tutorial:

<https://www.youtube.com/watch?v=uUB95RWKVj8&t=9s>

Glider tutorial:

<https://www.youtube.com/watch?v=7vEU3r00PuQ>