

11.1 The Flying Problem

Back to themes

Back to Autumn

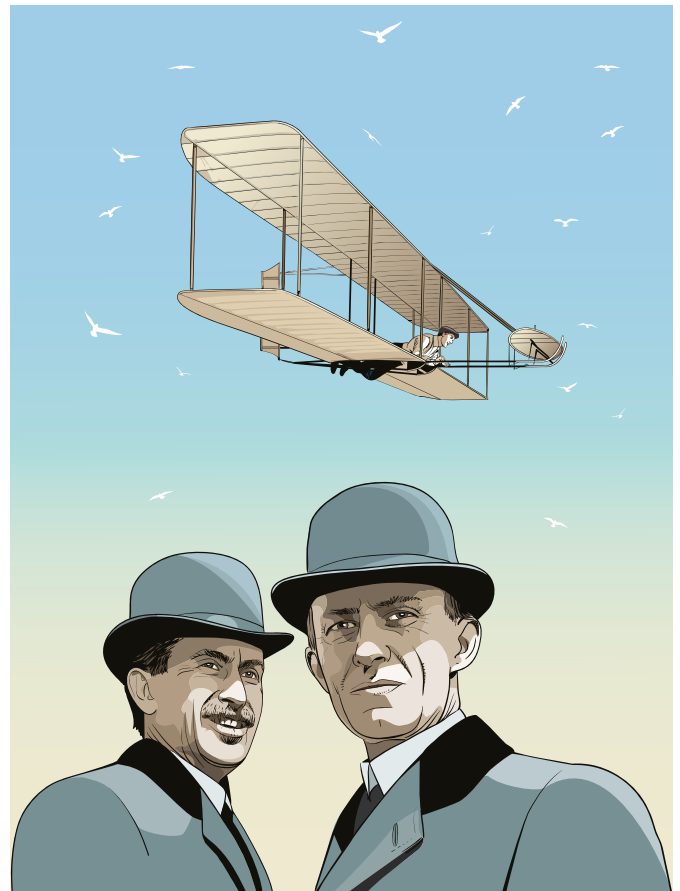
Preparation

Search and display an image of The Wright brothers' 'Flyer 1'.

Have you ever looked up on a clear day and seen the white wispy lines that crisscross the blue sky? Does anyone know what creates those lines? Has anyone been on an aeroplane recently? It is amazing to think that every day millions of people fly in planes at speeds of over 500 miles per hour, thousands of metres above our heads.

It is only about one hundred years that passengers have been able to fly on an aeroplane. But mankind has long shown an interest in flight. The first kite was probably created in China between 2500-3000 years ago. 2500 years ago a Greek philosopher is said to have created a 'steam powered pigeon'! 500 years ago Leonardo da Vinci, a famous artist and mathematician, created designs for flying machines and parachutes. In 1783 a hot air balloon was flown across Paris by the Montgolfier brothers. Gliders have been flying since the 1850's, they are a type of aircraft that can fly but they don't have an engine (like a large paper aeroplane). By the end of the 1800's there were a number of people that were trying to create an aeroplane that could move itself forward carrying a human being.

On the 17th December 1903 two American brothers, Wilbur and Orville Wright, flew a 'fixed wing' aeroplane that could carry a person. Orville was first; whilst sitting on the plane he took off, flew for about 53 metres, (about the length of half a football pitch) and landed the plane. Wilbur then flew about 60



metres. They quickly became more confident with their invention and Orville flew about 260 metres (over two football pitches).

The Wright brothers had spent a number of years trying to solve what they called 'the flying problem'. Whilst many other inventors were focused on what powered their aeroplanes, Wilbur and Orville focused on control. Before turning their attention to creating a working aeroplane the brothers had designed and created a printing press and then opened a shop fixing bicycles. They knew that anyone who rode a bicycle needed balance, they felt that balance was important when it came to flying.

The brothers spent four years making and testing kites and gliders before their first powered flight on the 17th December.



They travelled over 700 miles from Dayton in the American state of Ohio to Kitty Hawk in North Carolina to try out their new aeroplane, Flyer 1. After the fourth flight whilst on the ground, a strong gust of wind caught the aeroplane, turned it over and damaged the plane. The brothers returned to Dayton. They had learnt a lot from their first flight and began working on a new aeroplane. In September 1904, Wilbur was not only able to fly the new aeroplane, but he was able to control it, flying it around the airfield close to their home in Dayton. They again took what they learned from this second successful aeroplane and created a new one in 1905. The 1905 aeroplane was so successful it flew nearly 25 miles and reached 15 metres (50 feet) off the ground.

Problems come in all shapes and sizes. The Wright brothers solved what they called the 'flying problem'. The word 'inspired' means to do something because you have seen other people doing it. The Wright brothers were inspired by the work other people had done. They were able to use the research of others to help them design and build their own gliders and aeroplanes. After the Wright brothers' had successfully flown their aeroplanes there were other people that built powered aircraft including a famous inventor called Alexander Graham Bell. In 1907 the Wright brothers sold aeroplanes to the American army, they also sold their planes in Europe.

Wilbur and Orville are known as the Wright brothers. They worked well together to solve what they called 'the flying problem'. This week during our thoughts for the day, we are going to think about how we can solve problems. We will think about what we can learn from the example of the Wright brothers.

Time to reflect

- What problem did the Wright brothers solve?
- What problems do you need to solve today?
- Who can help you solve the problem?

Reflection (Prayer)

(Dear God)

We are thankful for people and inventions that have made a positive impact on our world. We are thankful for the example of the Wright brothers, they worked together to achieve what seemed impossible. May we be able to work together at school and at home to be able to solve the problems that we face. *(Amen)*



11.2 'Ears Open For Knowledge'

Back to themes

Back to Autumn

What was the name of the two brothers that we heard about yesterday? The Wright brothers began trying to solve their problem four years before their first flight. They researched the work of other people who had created gliders. The Wright brothers knew what they wanted to do and they were able to use the experience of others to help them. At school we have many problems, they come in all shapes and sizes. Some problems are about our work like maths problems or the writing of a story using the new skills we have just learned. Other problems may involve trying to fix our friendships after a falling out. In the Bible, it says "Intelligent people are always ready to learn. Their ears are open for knowledge." (Proverbs 18:15, NLT). Wilbur and Orville were ready to learn from the work and mistakes of others. We have many people around us that can help us to learn and solve our problems. Do we ask their advice? Obviously we can ask our teacher but there will be skills that you are good at that others are not so good at and there are skills that other people will be better at. When you face a problem do you ask for the help and advice of others?

Time to reflect

- What problems have you solved with the advice from others?
- What problems have you helped other people solve?
- Do you need to ask other people for help more often?
- Do you need to ask other people for help less often?

Reflection (Prayer)

(Dear God)

We are thankful for the people that are around us, for those that help us. Like it says in the Bible, may we be intelligent, keeping our ears open and learning from the work of others. *(Amen)*



11.3 Own The Problem

Back to themes

Back to Autumn

Yesterday we thought about solving our problems by using the skills and experiences of others. The Wright brothers used the experiences and skills of others to inspire them to create their own solution. The word 'solution' is the word we use to describe the way of fixing the problem. Although other people wanted to create a powered aeroplane, the Wright brothers saw it as their problem, it was the problem they wanted to solve. Many of the problems or tasks that we face in school can help us to master a skill. We may need to solve the problem before we can move onto more difficult problems. Think about a maths problem. If we master the skill of adding, it will help when we take away (subtract). If we master our times tables, it will help when we divide. We can ask a teacher for the answer, but it won't always give us the solution, it doesn't help us master the skills needed to solve our problem. Yesterday we said that we can use the skills and experiences of others to help us solve our problems, but like the Wright brothers we need to own the problem, then we can learn to solve it.

Time to reflect

- If someone else solved a problem for you, one that you could learn to solve, what would happen if you came across the same problem again in the future?
- Do you try to solve the problems you come across in your school work, or do you try to get others to solve them for you?
- How can you 'own the problem'?

Reflection (Prayer)

(Dear God)

We are thankful for the people around us that want to help us, but help us to own our problems, may we see that our targets and our tasks help us to improve and master skills that we can benefit from throughout our lives. *(Amen)*



11.4 The Wright Team

Back to themes

Back to Autumn

Successful pairs or teams work well together to solve a problem. Imagine two rowers in an Olympic race, their task (or problem) is that they need to get to the finish line. What would happen if one rower decided they weren't going to put much effort into rowing, instead they open a book and start to read whilst the other rower is working as hard as they can? When we work with others in pairs or in teams, we both own the problem. It is the problem that we should both be aiming to solve, or it is the task that we should both be aiming to complete. If you and a partner are given a task to complete or a problem to solve together, you both need to work together to complete it. Working in a pair when one person isn't helping is hard work but we can do much more when we work together. In a book of the Bible called Ecclesiastes it says that "Two people are better off than one, for they can help each other succeed. If one person falls, the other can reach out and help. But someone who falls alone is in real trouble." (Ecclesiastes 4:9-12 NLT). The Wright brothers worked together, researching and making models before they were able to successfully fly. When you read about Wilbur and Orville Wright, they are always talked about together. Even on their first flight they took turns so that they both could fly their new aeroplane.

Time to reflect

- I wonder how much the Wright brothers would have achieved if they worked separately?
- Have you ever worked in a pair, where your partner doesn't do anything? How did it make you feel?
- Have you ever worked really well in pair, did you do more than if you worked alone?
- What do you need to do to become a good partner?

Reflection (Prayer)

(Dear God)

We are thankful for teamwork and those around us that want to help us. May we understand the importance of working together. May we try our best to help ourselves, our partners, our teams and ultimately our communities. *(Amen)*



11.5 Wright Example

Back to themes

Back to Autumn

We can learn a lot about how to solve problems and working together from the example of the Wright Brothers.

1. They worked well together, each taking responsibility to help solve what they called 'the flying problem'.
2. Resilience is the ability to continue even though times are tough or you have failed in the past. The Wright brothers were resilient, they spent 4 years working on their first powered aeroplane. After their fourth flight on the 17th December 1903 their aeroplane was blown over and they had to travel back home and start on their next aeroplane.
3. They were committed to solving the problem. The Wright brothers travelled over 700 miles from Dayton where they lived and worked to Kitty Hawk to try out their aeroplane.
4. After making their first successful flight, they didn't pack up and call it a day. Instead they used what they had learned to start making a new and improved aeroplane.

Time to reflect

- What can we learn from the example of the Wright Brothers?

Reflection (Prayer)

(Dear God)

We are grateful for the lessons we can learn from the example of others. Help us to take responsibility for our work and the problems that we face. Give us the resilience to complete the tasks even though we find it hard and get things wrong. Help us to be committed to succeed in what we do. Finally help us to understand that the problems and tasks that we solve now will help us to achieve greater things in the future. *(Amen)*

