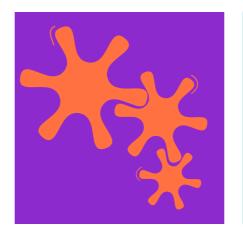
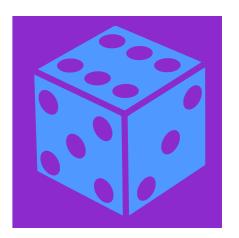
SPIRIT OF INNOVATION



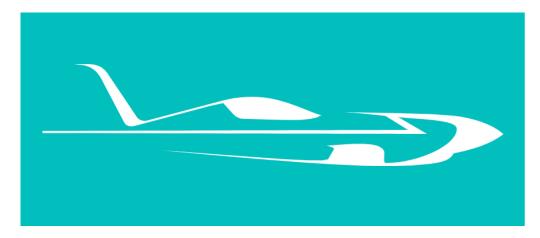




STEAM RESOURCES **Spirit of Innovation**

EYFS

Curriculum Overview











EYFS Spirit of Innovation WoW Plan

Communication and Language

WOW: Introduction to topic.

- Use their own experience of an aeroplane and flying.
 As a class recreate this experience.
- IWB Cockpit of plane
- Classroom chairs in rows
- Snack time water & fruit Plane refreshments
- Pupils take turns to be the pilot/flight attendants/passengers
- Make passports and tickets
- This could be replicated in the role play area afterwards.
- Turn the role play area into a recycling centre

Using how and why questions:

- Discuss how an aeroplane fly.
- Discuss how an electric aeroplane would fly.
- Child to draw their answer; teacher to annotate.
- What does recycle mean? Why is it important to recycle?

This involves giving children opportunities to speak and listen in a range of situations and to develop their confidence and skills in expressing themselves.

ELG 01 Listening and attention: children listen attentively in a range of situations. They listen to stories, accurately anticipating key events and respond to what they hear with relevant comments, questions or actions. They give their attention to what others say and respond appropriately, while engaged in another activity.

ELG 02 Understanding: children follow instructions involving several ideas or actions.

They answer 'how' and 'why' questions about their experiences and in response to stories or events.

ELG 03 Speaking: children express themselves effectively, showing awareness of listeners' needs. They use past, present and future forms accurately when talking about events that have happened or are to happen in the future. They develop their own narratives and explanations by connecting ideas or events.

Physical Development

- During PE weave in and out of spaces with arms out wide, stretching up tall and crouching down low.
- Travel from one place to another making a loop the loop path.
- Parachute Games

Fine Motor Skills

- Tuffy tray activity draw loop the loops in shaving foam
- Using any mark making tools; draw loop the loops.
- Make a duplo[®]/Lego[®] maze, place a ping pong ball /small pompom at the start of the track, use a straw to blow the ping pong ball around the track.

Health & Self-Care

• Understand the importance of sun cream.

Role play area

• A suitcase of holiday clothes; shorts, t-shirts, glasses, hats, ski goggles, gloves, salopettes

This involves providing opportunities for children to be active and interactive, and to develop their co-ordination, control, and movement. Children must also be helped to understand the importance of physical activity, and to make healthy choices in relation to food.

ELG 04 Moving and handling: children show good control and co-ordination in large and small movements. They move confidently in a range of ways, safely negotiating space. They handle equipment and tools effectively, including pencils for writing.

ELG 05 Health and self-care: children know the importance for good health of physical exercise, and a healthy diet, and talk about ways to keep healthy and safe. They manage their own basic hygiene and personal needs successfully, including dressing and going to the toilet independently.

Personal, Social and Emotional Development

Team Work

 In small groups, and using recycled materials or construction; can you make an aeroplane and electric charge point?

Ext: Maybe make the land and sky.

Outside Area

- In small groups, using crates and large building equipment can you build an aeroplane?
- Take turns to be the pilot
- Draw the land and sky with chalks on the playground.

Personal, social and emotional development This involves helping children to:

- develop a positive sense of themselves and others
- form positive relationships and develop respect for others
- develop social skills and learn how to manage their feelings
- understand appropriate behaviour in groups have confidence in their own abilities

ELG 06 Self-confidence and self-awareness: children are confident about trying new activities and say why they like some activities more than others. They are confident speaking in a familiar group, will talk about their ideas, and will choose the resources they need for their chosen activities. They say when they do or don't need help.

ELG 07 Managing feelings and behaviour: children talk about how they and others show feelings, talk about their own and others' behaviour, and its consequences, and

Suggested Books

- Flight School: How to fly a plane step by step by Nick
 Parnard
- A Journey Through Transport by Chris Oxlade
- The Wright Brothers (Fact Cat: History) by Jane Bingham
- I Am Amelia Earhart (Ordinary People Change the World) by Brad Meltzer
- Stephen Biesty's Flying Machines Hardcover by Ian Graham
- Emma Jane's Aeroplane by Katie Haworth
- My First Book of Transport (My First) by Collins
- Guinness World Records 2018(19)

Writing Suggestions:

- Draw and label their electric plane designs
- Make labels for models
- Write about going on a plane. E.g. It went up high. It went in the sky. I went in a cloud.

This involves encouraging children to read and write, both through listening to others reading, and being encouraged to begin to read and write themselves.

Literacy

Children must be given access to a wide range of reading materials such as books, poems, and other written materials to ignite their interest.

ELG 09 Reading: children read and understand simple sentences. They use phonic knowledge to decode regular words and read them aloud accurately. They also read some common irregular words. They demonstrate understanding when talking with others about what they have read.

ELG 10 Writing: children use their phonic knowledge to write words in ways which match their spoken sounds. They also write some irregular common words. They write simple sentences which can





know that some behaviour is unacceptable. They work as part of a group or class and understand and follow the rules. They adjust their behaviour to different situations and take changes of routine in their stride.

ELG 08 Making relationships: children play co-operatively, taking turns with others. They take account of one another's ideas about how to organise their activity. They show sensitivity to others' needs and feelings, and form positive relationships with adults and other children.

Word Bank:

- Spirit of Innovation
- Aeroplane
- Electric
- Engineer
- Design
- Propeller
- World Record

be read by themselves and others. Some words are spelt correctly and others are phonetically plausible.

Mathematics

• Cut out pictures from magazines; group them into land, sea or air. How many go on land? In the sea? In the air?

- Collect and record your class' favourite colour for an aeroplane.
- You could use coloured planes on a pictograph to show your findings.
- Take the classroom bin and group the 'rubbish' into recycling groups
- Again, these findings can be recorded as a pictograph.

Data:

- How many passengers? How many chairs? Snacks?
- Do we have enough chairs? Snacks?
- Fly your paper plane onto a number target: like a large dart board.
- Order the Suntan lotion from low factor to high factor
- How many pieces of rubbish would go in the paper recycling bag? etc

Shape, Space & Measure:

- Role play area: Buying aeroplane tickets
- Models/paper aeroplanes/ role play aeroplanes: talk about speed/time/fastest/slowest/distance/ furthest/shortest
- Ordering suitcases; heaviest to lightest
- Make a duplo[®]/Lego[®] maze, place a ping pong ball at the start, tilt and turn the board to move the ball, see if you can get it to the finish.
- How fast can you do it? Can you slow it down by changing the route?
- Which recycling pile has the most/least/none

practise and improve their skills in counting numbers, calculating simple addition and subtraction problems

- describe shapes, spaces, and measures

ELG 11 Numbers: children count reliably with numbers from 1 to 20, place them in order and say which number is one more or one less than a given number. Using quantities and objects, they add and subtract 2 singledigit numbers and count on or back to find the answer. They solve problems, including doubling, halving and sharing.

ELG 12 Shape, space and measures: children use everyday language to talk about size, weight, capacity, position, distance, time and money to compare quantities and objects and to solve problems. They recognise, create and describe patterns. They explore characteristics of everyday objects and shapes and use mathematical language to describe them.

People and the Community:

- Talk about members of their family that may have flown in a plane.
- How do your family sort the rubbish? Do you help? How?

The World:

- Famous people/companies/planes: The Wright Brothers/ Amelia Earhart/Concorde/Bell X1/Rolls Royce/Airbus/
- Observation:
- Explain how things occur: How does something heavy
- Why is there a need for an electric plane?
- Have you heard of climate change? What do you know about it?

Technology:

- How to make a propeller turn Lego® /K'nex/junk modelling
- Ext. Make the propeller turn using a motor and simple circuit (Snap Circuits)
- BeeBot (optional plane jacket)
- Direct the BeeBot to the go to the: powerwall/runway/sky/runway/hanger
- Can you design an aeroplane on the computer/tablet?
- Can you design a poster to encourage people to recycle?

Explore, observe and find out about people, places, technology and the environment.

Understanding of The World

ELG 13 People and communities: children talk about past and present events in their own lives and in the lives of family members. They know that other children don't always enjoy the same things and are sensitive to this. They know about similarities and differences between themselves and others, and among families, communities and traditions.

ELG 14 The world: children know about similarities and differences in relation to places, objects, materials and living things. They talk about the features of their own immediate environment and how environments might vary from one another. They make observations of animals and plants and explain why some things occur, and talk about changes.

ELG 15 Technology: children recognise that a range of technology is used in places such as homes and schools. They select and use technology for particular purposes.

Role Play:

- Airport/Aeroplane role play area
- Pilot/Passenger/Engineer
- · Recycling centre

Share their thoughts, ideas and feelings through a variety of activities in art, music, movement, dance, role play, and design and technology.







Art:

- Repurpose materials to model planes
- Use a variety of mediums to drawing and painting planes
- Bright bottle top sea creatures make links to the plastic in the ocean and the effect on the wildlife

Songs:

- Those magnificent men in their flying machines
- Counting song: 5 Little Airplanes
- I'm A Little Airplane

Sung to: "I'm a Little Teapot"

to their original positions.)

I'm a little airplane, (children raise arms at sides to shoulder height.)

Now watch me fly! (Both arms stretched out wide and tilt from side to side)

Here are my instruments (Point forwards)

From down low to up high. (crouch down low and stretch up high)

First, I get powered up. (Children spin their arms.)
Then I can fly, (Children raise arms to shoulder height.)
Lifting off the runway (They start walking forward.)
Up into the sky! (They go up on their tiptoes and continue to move forward. Let them circle a while before returning

ELG 16 Exploring and using media and materials: children sing songs, make music and dance, and experiment with ways of changing them. They safely use and explore a variety of materials, tools and techniques, experimenting with colour, design, texture, form and function.

ELG 17 Being imaginative: children use what they have learnt about media and materials in original ways, thinking about uses and purposes. They represent their own ideas, thoughts and feelings through design and technology, art, music, dance, role-play and stories.



