



Year 5 Autumn term

The World Around Us

This theme has been designed to engage the children in current affairs. By the end of the unit, they will understand how they can make a difference to the world around them as they are the future! The year 5 learning environment will be transformed into the Solar System, to fully ensure the children are immersed in their learning. To enhance the children's learning we will also visit The National Space Centre in Leicester. This will allow the children to further develop their knowledge about space. They will have the opportunity to be a robotic engineer and programme a rover to complete challenges across the surface of Mars. They will also visit MK Recycling centre and experience first-hand how the process of recycling takes place.

Science

Earth and Space

- I can describe the movement of the Earth, and other planets, relative to the Sun in the solar system
- I can describe the movement of the Moon relative to the Earth
- I can describe the Sun, Earth and Moon as approximately spherical bodies
- I can use the idea of the Earth's rotation to explain day and night and the apparent movement of the sun across the sky
- I can compare the time of day at different places on Earth
- I can explain that unsupported objects fall towards the Earth because of the force of gravity
- I can identify the effects of air resistance, water resistance and friction

Properties of materials

- I can sort materials by their properties and justify my reasons
- I can identify materials that conduct electricity
- I can explain why certain materials are suitable for purpose e.g. transparency
- I can identify how to separate solid materials
- I can identify how to separate solid and liquid materials
- I can recognise that some solids dissolve in liquids
- I can work scientifically to evaluate how solids dissolve in liquids
- I can explain how to separate dissolved solids from a liquid
- I can demonstrate reversible and irreversible changes
- I can recognise that some changes result in the formation of new materials

Computing

- I can use technology safely, respectfully and responsibly
- I can explain how to protect my online identity
- I can recognise what a robot is and what it isn't
- I can use the language of input and output when discussing programming
- I can link my knowledge to scratch to create a simple programme

(Statements in italics are during the workshop at the Space Centre)

- *I can create a programme with a timed outcome*
- *I can create a set of instructions using the turn command*
- *I can make a robot do a pivot turn*
- I can use a sensor to prevent the robot from crashing
- I can steer a robot around an obstacle
- I can programme my robot to react to an obstacle
- I can use a touch sensor/sound sensor on my robot to avoid obstacles
- I can use a light sensor for the robot to follow a torch
- I can evaluate how successful my programming skills are

Geography

- I can explain what a rainforest is and why it is important to save them.
- I can label a map of the world correctly and indicate where the rainforests are.
- I can identify on a map the equator (revisit from AA Y3)
- I can identify the Tropics of Cancer and Capricorn
- I can recognise how humans have affected the landscape over time (i.e. icecaps and rainforests)

Religious Education

- I can explain what peace is and what makes us feel peaceful
- I can explore different symbols of peace
- I can discuss why Christmas is a time of peace for Christians
- I can talk about the positive impact of believers' actions on others at Christmas time
- I can recognise why soldiers fighting during WWI fought about peace at Christmas time
- I can use an increasingly wide religious vocabulary to explain the impact of beliefs upon individuals and communities
- I can reflect on the story 'A Christmas Truce'



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Art and design

- I can use my sketchbook to try out a number of different ideas before finding a design I am happy with that I can carry forward to a finished piece of work.
- I can improve my drawing by learning how to shade curved and shiny objects
- I can be inspired by the work of Vincent van Gogh and use his work as a starting point for my own composition.
- I can increase my skills using oil pastels using blending and layering techniques
- I can begin to understand perspective and the role of the background, foreground and middle-ground in my pieces of work.

Languages

- I can say what I eat and drink for certain meals.
- I can name foods I like/don't like by using interesting adjectives.
- I can name foods that are healthy/unhealthy.
- I can read and understand short simple passages.
- I can name the location of the planets to each other.
- I can use some prepositions.

Music

STOMP PERCUSSION WORKSHOP

- I can follow and copy simple drumming rhythms at my Stomp percussion workshop
- I can demonstrate an understanding of how different everyday items can be used percussively and that they create different pitched sounds
- I can demonstrate excellent listening skills and be aware of others and myself as a performer
- I can enthusiastically participate in my Stomp percussion workshop and combine drumming patterns, culminating in a confident whole year group performance

British Values

- I can democratically vote in Loughton's 'student voice' elections
I can take part in a discussion and express my viewpoint.
- I can take part in a discussion about current affairs regarding the world around me.
- I can explain why it is important to stop deforestation.
- I can discuss the impact rubbish and plastic is having on the environment and explain what it is important to take action now.
- I can discuss the importance of the Reduce, Reuse, Recycle campaign and why it is important to take action now.
- I can discuss what democracy is and why it is important in today's society.

Music

- I can, with developing confidence, focus my listening and understand that sounds can be contrasted
- I can, with support, discuss different musical elements such as texture, pitch, tempo, duration
- I can discuss how pitched sounds, when combined, can sound relaxed or tense
- I can generally listen with concentration and identify contrasting moods and sensations
- I can explore different textures using tuned sounds
- I can, with developing confidence, create different sound effects using combinations of pitched sounds on the keyboard
- I can generally explore, select, combine and exploit a range of different sounds to compose a soundscape stimulated by space
- I can, with support, use musical sounds creatively by changing, organising and controlling them in composition.

CAROL CONCERT

- I can confidently participate in a whole year group performance, focussing on correct breathing technique, maintaining pitch and tempo
- I can confidently maintain performance position and perform with confidence and clarity to a large audience