DISTILLATES

January 2024 - Issue 1

Welcome friends to the first edition of Distillates, our termly newsletter celebrating the wonders of science. In this publication, we aim to highlight the incredible science happening in our Assisi Catholic Trust schools, update you on important advancements in the scientific world, and bring some fun with exciting competitions!

St Albert the Great

Patron Saint of Science Students

St. Albert the Great, born around 1206 in Germany, was a wise and kind man, a scientist, philosopher, and teacher of St. Thomas Aquinas.

He loved learning and believed that studying the natural world could help people appreciate God's creation. His humility and kindness make him a great role model.

In 1931, Pope Pius XI declared him a Doctor of the Church, which is a special title given to saints who made significant contributions to understanding and explaining the teachings of the Church.

So, St. Albert the Great is remembered as a great scientist who dedicated his life to learning and serving others.

Get creative and enter the Assisi Catholic Trust Science poster competition. You can make a poster about anything involving. 'Time'. We will enter the five best poster entries into a UK-wide competition, allowing you the chance to win an array of prizes.

'Time' as a theme offers a huge range of topics to delve into.

Please email a picture of your poster along with your name, class, and school to sjjones@st-thomasmore.southend.sch.uk by 1st March 2024. Those short listed will be contacted by March 8th Good luck!

Time is super important in science, tech, engineering, and maths! Evolution leads to plants and animals changing over time. Earth's movements give us seasons and time zones. When studying stars and planets, we measure distances in lightyears – that's how far light travels in a year!

Lifecycles are about how living things grow and eventually pass away. People usually live for about 73 years. You could explore how long other animals live and what they do.

Cool inventions like clocks help us keep track of time. In engineering, time is crucial for machines to work smoothly. Can you think of any machines that rely on precise timing?

Let's make it!!!!!
Cicada harmonica

https://youtu.be/-CdMEcSRivg

RSPB **Big Garden Birdwatch** 26th – 28th January

Take part in the world's largest garden wildlife survey.

Spend just one hour watching and recording the birds in your garden or local green space, then send your results to the RSPB.

For more information and to register visit:
www.rspb.org.uk/birdwatch

St. George's Catholic Primary School

News from St George's

This term, a group of children were chosen to be this year's Science Ambassadors. Each child that was interested in the role, had to apply by either writing a letter or making something such as a poster, to show why they would be ideal for the role. The picture aside, is of Toby from Year 3, who applied for the role. He creatively demonstrated his passion for science and was a successful candidate!

To further promote science at St. George's, an afterschool science club took place in the Autumn term for Years 4, 5 and 6 children. The children followed the CREST awards scheme and will be awarded with a 'Superstar' award for completing a set of practical investigations.
Some of the practicals include investigating ingredients of toothpaste and making their own paste, which can remove permanent marker from a white tile. They also made a range of glues to find out which is the best adhesive to stick lolly sticks together.
The photo aside is of an investigation into how birds make nests; the children had to make their own birds nest using 'beaks', which could withstand rain and strong winds!

News from St Joseph's

Our young explorers have been on a culinary escapade, discovering the wonders of seasonal vegetables. From creating delicious fruit smoothies to crafting Japanese fruit kebabs, they've not only enhanced their nutrition knowledge but also indulged their taste buds in a "Taste Battle" where chocolate spread emerged as the clear winner. Alongside these culinary adventures, the importance of health and safety has been embraced through lessons on handwashing and road safety, while our energetic students have been staying super healthy by riding their bikes.

Venturing into the vastness of space, our students have crafted a massive scale model of the solar system, allowing them to explore the planets and their positions in a hands-on way. From using PlayDough to delve into the science of fossils to learning about various rocks and their properties, our students are reaching for the stars and diving into Earth's geological wonders. Drawing conclusions from collected data, they've extended their curiosity to constructing structures, showcasing the practical applications of their newfound knowledge.

News from St Helen's

We're excited to give you a sneak peek into the vibrant learning happening in our school through our working walls and the incredible efforts of our Science Ambassadors!

Year 5 Materials and Year 3 Healthy Eating:
Take a look at our Year 5 working walls, where students are delving deep into the world of Materials. From understanding their properties to exploring how they can be used in various applications, our young scientists are making fascinating discoveries. Simultaneously, Year 3 students are on a journey of healthy living.

Year 2 and the Great Fire of London:
Year 2 students, while studying the Great Fire of London, have seamlessly integrated science into their historical exploration. They've examined materials, noting how some burned differently than others during the historic event. This included a fascinating look at the construction materials used in houses during that era. It's incredible to see the interdisciplinary approach to learning!

Science Ambassadors Leading the Way:

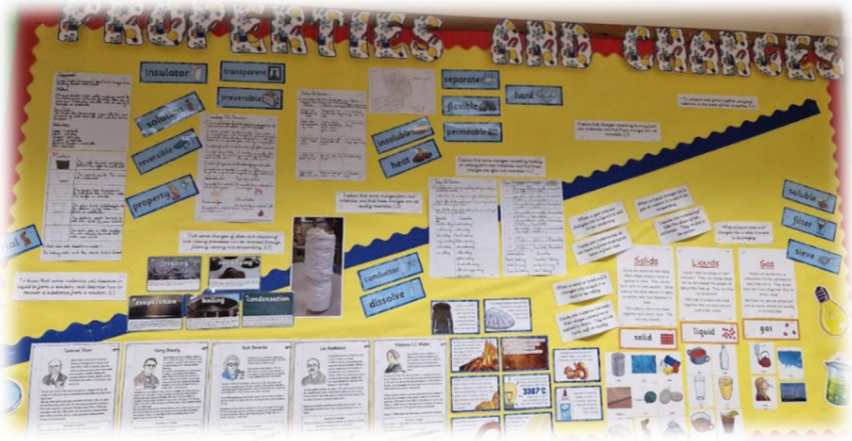
Meet our Science Ambassadors, one per class! These dedicated leaders play a vital role in organizing and leading science experiments for their classes. Their passion for science shines through as they inspire their peers with hands-on experiments, fostering a love for discovery. It was great to work with the science ambassadors from St Thomas More they were a credit to the school and every teacher said how much they helped and joined in. I hope they enjoyed the experience of younger children and we're looking forward to the next experiment!

News from Our Lady of Ransom

This term we appointed our new Science ambassadors. The children were very excited about their new role and keen to share their love of Science with the rest of the school . They confidently presented an assembly to the whole school explaining how important it is to brush your teeth properly.

Our Year 3 pupils have enjoyed learning about rocks and soils. To show how igneous rock is formed, they poured 'crackin chocolate' onto ice lollies and observed it cracking as it set. They explored the formation of sedimentary rock by using slices of bread to represent mud and sand layers and embedding different objects between the slices. They then pressed their 'sedimentary sandwiches' with heavy weights.

Our Year 5 pupils have been busy exploring the properties of materials, changes and states of matter. They enjoyed mixing different solutions and investigating reversible and irreversible changes. They particularly investigating making different solutions and observing whether the changes were reversible or not.



News from Sacred Heart

RAF Marvellous Maths Minds Workshop Sparks Excitement at Sacred Heart.

We are delighted to share the exciting news that the RAF Marvellous Maths Minds Workshop recently visited Sacred Heart this term, providing our year 4 and 5 pupils with a unique and interactive experience in building and programming robots. This fully funded workshop was a fantastic opportunity for our students to delve into the world of robotics, expanding their knowledge and skills in programming.

During the workshop, our pupils had the privilege of working in pairs, dedicating two hours to the fascinating process of constructing and programming their own robots. Guided by the knowledgeable instructor, Jack, the students were introduced to the fundamentals of robot construction and the intricacies of programming. The highlight of the day was the practical application of their newfound skills as they navigated their robots through a set course.

The workshop not only provided an engaging platform for learning but also fostered teamwork and collaboration among the participating students. The joy and enthusiasm displayed by our pupils were truly heartwarming, showcasing their eagerness to explore the world of technology and robotics.

We extend our sincere gratitude to RAF Marvellous Maths Minds for generously funding this workshop, allowing our students to benefit from this enriching experience. Such initiatives play a crucial role in inspiring a love for learning and nurturing the curiosity of our young minds.

We look forward to more opportunities that ignite the passion for STEM (Science, Technology, Engineering, and Mathematics) subjects among our students and contribute to their holistic development.

News from St Thomas More

We are buzzing with excitement as various engaging activities are in full swing, bringing the wonders of science to life! Here's a glimpse of what's happening:

Gardening Club: Our gardening enthusiasts are busy cultivating plants, fostering a love for nature, and developing an appreciation for the intricate ecosystems that surround us, as they witness the magic of growth and discovery in our very own green corner!

Lab Rats Science Club: For those who crave hands-on experiences, the Lab Rats Science Club is the place to be! We're taking science beyond the classroom with thrilling experiments that ignite curiosity and spark a passion for discovery. The students roll up their sleeves and delve into the world of scientific exploration!

Marine Biology Program: The boys are deep diving into the mysteries of the ocean with our special program dedicated to marine biology. Beyond the usual lessons, students have the opportunity to explore underwater science, gaining insights into the 'out of sight, out of mind' areas of the ocean as they unleash their inner marine biologist and embark on an aquatic adventure!




The laboratory is buzzing with activity as a variety of practical experiments take center stage. From thrilling demonstrations to hands-on projects, students are actively engaging with scientific concepts, making learning a dynamic and memorable experience.

At St Thomas More High School, the Science Department is not just about education; it's about fostering a new generation of scientists. We believe in making science fun, interactive, and a journey of exploration. We are on a mission to nurture curious minds and ignite a lifelong passion for science!

News from Our Lady of Lourdes




<u>The Science Roadshow:</u> Year 5 students had a fantastic science afternoon exploring microscopes, conducting chemical experiments, building electric circuits, and engaging in chromatography during the visit of the Science Road Show team.

<u>National Science Quiz:</u> Congratulation to our Y5 & 6 students who entered this prestigious quiz. Despite some very challenging questions, they made it to the semi- finals and great fun.

<u>Vegetable Soup:</u> In Year 3, students explored the world of plants, learning about their growth. As a hands-on activity, they created vegetable soup using a diverse selection of vegetables and relished tasting it.

<u>Exploring Materials:</u> Year 2 students have had a delightful time discovering the characteristics of various materials and experienced a joyful science morning creating Christmas cards with a variety of materials.

<u>Sound:</u> The year four students delved into the study of Alexander Graham Bell, the invention of the telephone captivated them. Did you know that his wife and mother were both deaf? They also created their own string telephones and conducted experiments to explore how sound travels through various materials. They are looking forward to meeting a deaf person learning how deafness affects her daily life, some simple sign language.

Super Science Quiz (Just for Fun)

1) What is the center of our solar system?
A) Moon / B) Earth / C) Sun

2) Which planet is known as the "Red Planet"?
A) Venus / B) Mars / C) Jupiter

3) What is the process by which plants make their own food using sunlight?
A) Respiration / B) Photosynthesis / C) Digestion

4) Which of the following is a mammal that can fly?
A) Bat / B) Butterfly / C) Eagle

5) What is the Earth's largest ocean?
A) Atlantic Ocean / B) Indian Ocean / C) Pacific Ocean

6) What gas do plants absorb from the air during photosynthesis?
A) Oxygen / B) Carbon Dioxide / C) Nitrogen

7) Which force pulls objects towards the center of the Earth?
A) Magnetism / B) Gravity / C) Friction

8) What is the process of water turning into vapor called?
A) Melting / B) Freezing / C) Evaporation

9) What is the hardest natural substance on Earth?
A) Gold / B) Diamond / C) Iron

10) How many continents are there on Earth?
A) 5 / B) 6 / C) 7

ANSWERS
1C) 2B) 3B) 4A) 5C) 6B) 7B) 8C) 9B) 10C)

Finally: **We'd love to hear about all the science you have been doing at home! Tell us what you've been up to, send us photos and you may well feature in next terms Distillates.**
God Bless,

The Science Team at Assisi Catholic Trust