Our work is inspired by the article related to the Scientific Revolution from the Junior Secondary History e-Reading Award Scheme 2024. The article inspiresour group to explore more about Copernicus.

Copernicus was indeed a lifelong learner with a passion for seeking knowledge and truth. He discovered that the explanations and theories of ancient Greece upheld by the people in his times contained mistakes. Therefore, he persistently made observations and studied to improve the understanding of the universe. Even though his Heliocentric theory was only published and circulated among European universities in the 1560s, twenty years after his death, his theories prevailed and eventually laid the foundation of humankind’ s new understanding of the universe. From this, we learnt to appreciate his diligence, persistence and dedication in pursuing knowledge of the universe.

Therefore, we hope to use a scientific model to retell his ideas and shed light on this important history, and pay tribute to his role and contributions made to the development of astronomy. We created the model and attempted to incorporate STEAM elements.

- In terms of science, we showcased Copernicus' observations on the orbit of planets in the solar system.
- For technology, we employed a Micro:bit and a 360-degree Servo motor to simulate the orbits of Mercury, Venus, and Earth around the Sun, thus illustrating Copernicus' heliocentric theory. To program the 360-degree Servo motor, an electronic device that rotates and moves machine parts, we utilised the "analog write pin" blocks. Additionally, we employed laser cutting to create an authentic-looking Saturn ring.
- For engineering, we used LEGO scaffolding tools to connect the Sun, Mercury, Venus, and Earth with the motor.
- In terms of art, we painted each planet and the Milky Way in Acrylic colors by ourselves.
- Meanwhile, mathematics played a crucial role throughout our project, from measuring the model's scale to calculating the number of years each planet takes to revolve around the Sun.

Lastly, we put a LEGO Minifigure on Earth to represent Copernicus.