| Title           | STEM Bible Camp—Genesis Creation                 |
|-----------------|--|
| Topic/Field     | life sciences / engineering and applied sciences |
| Target audience | Youths / Children                                |

The "STEM Bible Camp—Genesis Creation" is an innovative program that integrates STEM education with the biblical creation narrative, offering a unique hands-on learning experience. Utilizing the "Aqua Phonics" system as the foundational platform, the camp illustrates the six days of creation described in Genesis through interactive scientific models, reinforcing both faith and science.

The journey begins on **Day 1: "Day and Night"**, where LED grow lights are used to represent God's command, "Let there be light," symbolizing the introduction of light into the world.

Moving to **Day 2: "Sky and Water"**, the camp demonstrates the water cycle using a container filled with water and a water pump cycling the water into the air and back to the container, showcasing the separation of water and the sky.

On **Day 3: "Dry Land and Vegetation"**, a hydroponic system is used to illustrate the emergence of plant life and land formation, reinforcing the importance of vegetation in sustaining life.

**Day 4: "Sun, Moon, and Stars"** incorporates solar energy conversion, where a solar panel powers the hydroponic system, representing the celestial bodies and their role in sustaining life on Earth.

The fifth day, "Birds and Fish", is creatively depicted using mechanical toy fish swimming in the water container and toy birds positioned on the LED lights and hydroponics system, symbolizing the creation of aquatic and airborne creatures.

**Day 6: "Animals and Adam & Eve"** features figurines of animals and humans, representing the formation of animals and humans. To further emphasize biblical teachings, the entire system is controlled by an electrical switch, symbolizing the dominion God has entrusted to humanity over His creation.

On **Day 7: "Rest and Blessing"**, the camp participants take a break, dedicating the time to worship and praise God, acknowledging the significance of rest and aligning with the biblical principle of Sabbath rest.

By integrating faith and STEM education, this camp fosters a deeper understanding of scientific principles while reinforcing biblical truths. Participants gain practical knowledge of renewable energy, water cycles, hydroponics, and electronics, demonstrating how science can complement and affirm faith. Additionally, the camp includes various hands-on activities, such as studying the dispersion of white light, mixing primary colours light, and using a microscope to examine plant leaves, bird feathers, and fish scales. Participants also engage in identifying and naming different internal organs using a non-woven human body model and internal organ stickers.

In conclusion, the "STEM Bible Camp—Genesis Creation" serves as a dynamic platform where **science and faith harmoniously coexist**, fostering curiosity, innovation,

and spiritual growth. Through engaging activities and interactive models, participants not only explore the wonders of creation but also develop a **deeper appreciation for God's divine order and their role as stewards of the Earth**. This program is a testament to how education can be both **enlightening and spiritually enriching**, inspiring young minds to see the beauty of God's creation through the lens of science and faith.



| Author's name<br>(first name, last name) | Swee Hock Frederick, CHEAH                          |
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| Author's organization and appointment    | Lighthouse of Hope (Sarawak) Berhad STEM Specialist |

## **Curriculum Vitae**

I am a volunteer with **Lighthouse of Hope (Sarawak)** as a **STEM Specialist** to promote STEM education in schools across Sarawak, Malaysia. My role in the organization is to **support** and complement the state government's efforts to enhance STEM education in local schools. I teach **coding lessons** to primary and secondary school students using **SCRATCH programming** with a robotic car, as well as introduce **sustainable energy concepts** through solar energy.

During school visits, when given the opportunity to share Bible knowledge with the children, we conduct the **STEM Bible Camp**, using the **Genesis Creation** narrative as a platform to teach science and faith in **harmonious coexistence**. This approach fosters **curiosity**, **innovation**, **and spiritual growth**, helping students see the connection between scientific principles and biblical teachings.

Lighthouse of Hope, Sarawak was founded in the heartland of Sarawak, in Kapit Town, Kapit Division—the home of the country's largest indigenous group, the Ibans. Its core mission is to transform the minds, souls, and hearts of the Next Generation, helping them reach their full potential and equipping them to face the challenges of the 21st century. This mission extends to youth, community, family, social, and economic

development through engaging and empowering transformational processes. <a href="https://lighthousesarawak.com/">https://lighthousesarawak.com/</a>