

Cap-Mation For Calvin Cycle

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Abstrak

Cap-Mation is an online independent learning module that covers the whole process of the Calvin Cycle in photosynthesis. Based on feedback, most students find it difficult to comprehend and memorize the names of the molecules and reactions involved in the Calvin Cycle. Therefore, Cap-Mation was invented to aid further understanding and to promote student-centered learning. Cap-Mation is a simple hand animation using real bottle caps to represent the molecules involved. This module is also provided in a digital platform for an easily accessible learning experience for everyone, anywhere and anytime. This innovation can also be commercialized by manufacturing the bottle cap model as a teaching tool kit for Calvin Cycle.

Keywords: Cap-Mation, Calvin Cycle, photosynthesis,



TEACHING AND LEARNING POSTER IDEAS

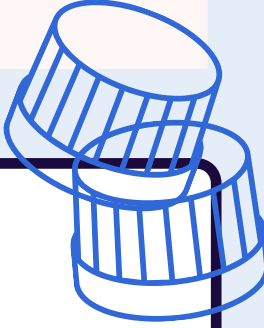
TALPI 2023

"TOWARDS INNOVATIVE GLOBAL TRENDS IN EDUCATION"

VIRTUAL COMPETITION

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FOR CALVIN CYCLE



CAP - MATION

ABSTRACT

Cap-Mation is an online independent learning module that covers the whole process of Calvin Cycle in photosynthesis. Based on feedbacks, most students find it difficult to comprehend and memorise the name of the molecules and reactions involved in Calvin Cycle. Therefore, Cap-Mation is invented to aid further understanding and to promote student-centred learning. Cap-Mation is the simple hand animation using real bottle caps to represent the molecules involved in which it potentially provides the digital platform for an easily accessible learning for everyone, anywhere and anytime. This innovation can also be commercialized by manufacturing the bottle cap model as teaching tool kit for Calvin Cycle.

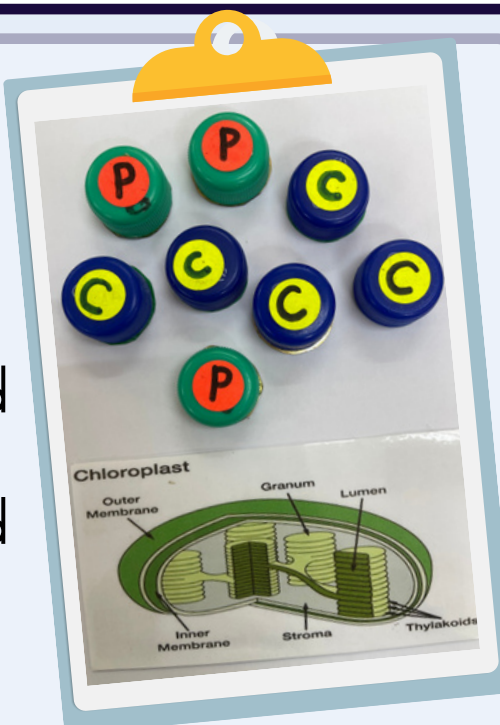
1.0 OBJECTIVES

STUDENTS:

- To help students to understand Calvin Cycle thoroughly
- To encourage student-centred and independent learning

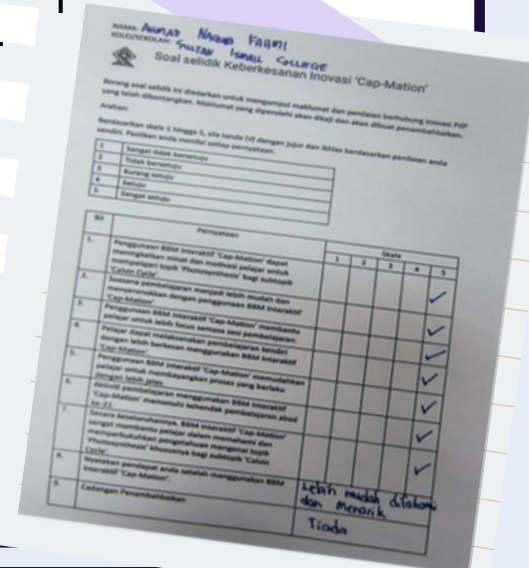
LECTURERS:

- To enhance the use of teaching aids and digital platform in explaining about Calvin Cycle
- To create variety in teaching and learning experience



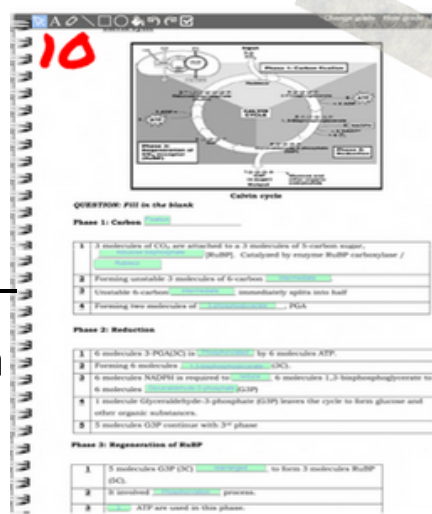
2.0 ADVANTAGES

- Applicable & accessible anytime & anywhere with good internet connection
- Create excitement and explorative learning environment for students & lecturers
- Interactive module



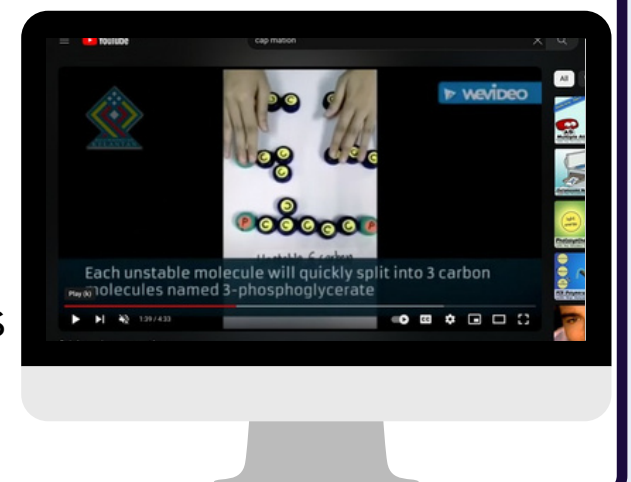
3.0 USEFULNESS

- User friendly & easily accessible
- The model is easily remake & low-cost
- The questions are available both offline & online via LiveWorksheet



5.0 COMMERCIALISATION POTENTIAL

- The animation video is available on YouTube & TikTok. Viewers are able to download, share & repost the content on their social media
- Available online with the hashtag #capmation
- Potentially to be commercialized by manufacturing the bottle cap model as teaching tool kit for Calvin Cycle



4.0 NOVELTY

A unique model using the real bottle caps to represent the molecules involved in Calvin Cycle



6.0 LIST OF INVENTORS :
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Surat kami : 700-KPK (PRP.UP.1/20/1)

Tarikh : 20 Januari 2023

Prof. Madya Dr. Nur Hisham Ibrahim
Rektor
Universiti Teknologi MARA
Cawangan Perak



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2. Adalah dimaklumkan bahawa pihak kami ingin memohon kelulusan tuan untuk mengimbas (*digitize*) dan memuat naik semua jenis penerbitan di bawah UiTM Cawangan Perak melalui Repositori Institusi UiTM, PTAR.

3. Tujuan permohonan ini adalah bagi membolehkan akses yang lebih meluas oleh pengguna perpustakaan terhadap semua maklumat yang terkandung di dalam penerbitan melalui laman Web PTAR UiTM Cawangan Perak.

Kelulusan daripada pihak tuan dalam perkara ini amat dihargai.

Sekian, terima kasih.

“BERKHIDMAT UNTUK NEGARA”

Saya yang menjalankan amanah,

SITI BASRIYAH SHAIK BAHARUDIN
Timbalan Ketua Pustakawan

nar

Setuju.

27.1.2023

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