FABER-CASTELL
since 1761

Secondary

Are you the next TOP STUDENT?

SCORE A
FABER-CASTELL

Join the Score A Student Olympiad 2026

and stand a chance to win prizes worth up to

RM35,000

Category A	Category B	Category C
Standard 1 - 6 / Year 1 - 6 (Primary)	Form 1 - 3 / Year 7 - 9 (Lower Secondary)	Form 4 - 5 / Year 10 - 11 (Upper Secondary)

This Program is supported by **Ministry of Education**

For more details, visit: https://scoreawithfc.my/

Why Join?

E-Certificate

with **PAJSK** Marks*

**PAJSK marks are awarded for completion of Mission 1.*

Exciting Prizes To Be Won

- ★ Cash prizes
- ★ Product hampers
- ★ Customised trophies
- ★ Exclusive field trip**

***Field trip is subject to selection criteria and availability.*

Learn Smarter

Turn long and complex information into clear, **visual one-page notes**. Use **colour-coding techniques** to strengthen memory and recall.

Think Sharper

Learn to **think outside the box**, **analyse problems** creatively, and **express your ideas** clearly and convincingly.

Speak Confidently

Deliver **impactful presentations** and capture your audience's attention.

How to Join

Step 1

Understand & Create

Read the Mission 1 article and create your Creative Note using creative learning techniques

Article available in:
English / Bahasa Melayu / Chinese

Scan here to download:

M1

https://tinyurl.com/scorea2026-mission

Step 2

Submit Your Creative Note
by 19 July 2026

Choose ONE submission method

1. **Individual Submission**

Scan here

https://tinyurl.com/scorea2026-submission

2. Submit to your **Teacher-In-Charge**

Scan here

Only for **Teacher**
https://tinyurl.com/scorea2026-submission-bulk

Step 3

Answer the Quiz
by 19 July 2026

Answer the online quiz based on the Mission 1 article

Only the first attempt will be counted

Scan here to access quiz:

QUIZ

https://tinyurl.com/scorea2026-quiz

Secondary Category (B & C)

Behind Your Screen: Money, Apps & Online Choices

In today's digital world, many everyday decisions are made through screens. We shop online, pay using digital wallets, and make purchases with just a few taps. These actions feel simple and personal. However, behind every click, search, and payment, multiple invisible digital systems are constantly working together. These systems do not only move money; they actively shape what we see, what captures our attention, and how quickly we decide.

When you open an online shopping platform, a platform system immediately organises what appears on your screen. This system includes several components such as the layout design of the app, the search function, product ranking tools, and a recommendation engine. Together, these components determine how the platform is structured, where buttons are placed, and which products appear first. Items placed at the top of search results or homepage displays receive more attention because users are more likely to click on them. As a result, the platform does not simply display products randomly. Instead, its design guides user attention and can influence what people perceive as popular, useful, or worth buying.

As users browse the platform, tracking technologies begin recording how they interact with the website or app. Two common tools used are cookies and tracking pixels, and each plays a different role in collecting behavioural data. Cookies are small data files stored on a user's device when a website is visited. They help the platform remember information such as login status, items added to a shopping cart, previous searches, and browsing preferences. This allows users to return to the site without re-entering information and enables the platform to recognise repeat visits. Tracking pixels, on the other hand, are tiny invisible images embedded in webpages, advertisements, or emails. When a page containing a tracking pixel loads, it sends information back to the server, allowing the platform to record actions such as whether a page was viewed, how long a user stayed on it, or whether an advertisement was opened.

Together, these technologies capture a wide range of behavioural signals, including search keywords, products clicked, scrolling behaviour, viewing time, and purchase history. Even small interactions—such as pausing on a product image, comparing multiple items, or revisiting the same page—can be recorded and analysed.

The data collected is then analysed using algorithms. An algorithm is a set of programmed instructions that tells a computer how to process information and identify patterns in large amounts of data. Instead of understanding intentions or emotions, algorithms rely on statistical patterns in user behaviour. By analysing past actions, algorithms estimate what a user is likely to search for, view, or purchase next. For example, if a user frequently searches for stationery products, the system may predict continued interest in similar items and begin showing more pens, notebooks, or art supplies. In this way, algorithms power recommendation systems that personalise the shopping experience by selecting which products, advertisements, or promotions appear on each user's screen.

For example, imagine a student searching online for a "Faber-Castell yellow highlighter" for school. The student clicks on several highlighter options and reads product reviews but does not make a purchase. Later, when the student opens the shopping app again, similar highlighters appear on the homepage, often labelled "Recommended for You." Even when using other platforms such as YouTube, Google, or social media, advertisements for stationery may appear. This happens because invisible systems have recorded the student's searches and clicks. Algorithms analyse this data and predict continued interest in similar products. The system is not reading the student's thoughts — it is using patterns from past behaviour to decide what to show next.

In addition to recommendations, a ranking and promotion system influences visibility. This system decides which products appear at the top of search results and which deals are highlighted. Popular items, sponsored products, or those that generate higher profit are often given priority. Other products may be placed lower and receive less attention. As a result, user choices are shaped not only by personal preference, but also by business rules built into the system.

Once a user decides to buy, a payment system operates behind the screen. This system connects the platform to banks, e-wallets, and QR payment networks to transfer money securely. In Malaysia, systems such as DuitNow QR allow payments to be completed almost instantly across different banks and e-wallets through saved payment details and one-click checkout. Because transactions are fast and confirmation messages appear immediately, spending feels smooth and effortless. The faster the system works, the less time users have to reflect on whether a purchase is truly necessary.

Artificial intelligence (AI) expands how these systems collect and interpret information. Voice search and smart assistants use AI systems that activate only when a wake word is spoken (like "Hey Google" or "Siri") or a button is pressed. When activated, spoken words are converted into text and added to the user's data profile. This means that voice queries become another source of input for the recommendation system. Over time, what a person says can influence future advertisements, search results, and suggested products. Although speaking to a device may feel like a conversation, AI does not understand feelings or intentions. It simply recognises patterns in both typed and spoken data to refine predictions.

The systems operating behind digital platforms today are the result of continuous technological development. In the early 2000s, online platforms were relatively simple, mainly displaying products or information in basic lists with limited personalisation. As internet access improved and smartphones became widely used in the 2010s, these platforms became more interactive, allowing users to browse, shop, and make payments anytime and anywhere. During this period, platforms also began collecting user data more actively, enabling the introduction of recommendation systems and targeted digital advertising.

By the late 2010s, advances in data analytics and digital payment technologies allowed platforms to offer faster, more seamless experiences. Features such as personalised recommendations, secure e-wallet payments, and simplified checkout processes became common. Today, with the use of artificial intelligence (AI) and machine learning, digital platforms can analyse large amounts of data in real time. This allows systems to refine recommendations, support interactive features such as live-stream selling, and create highly personalised digital experiences. These developments show how platforms have evolved from simple tools into complex systems that actively shape what users see, how they interact, and how they make decisions.

Because these systems have become more advanced and influential, understanding how they operate is increasingly important for users today. Recommendations, advertisements, and search results are often shaped by patterns in user data rather than appearing randomly. When users recognise that their online experience is influenced by algorithms and platform design, they can approach digital platforms more thoughtfully. Developing this awareness—along with responsible habits such as checking information, comparing options, and pausing before making purchases—allows people to benefit from digital technology while making smarter and safer decisions online.

Critical Thinking Question (CTQ):

You are the Head of E-commerce at Faber-Castell.

Online shopping platforms use hidden systems that can influence how students spend money. How would you redesign the Faber-Castell e-shop to help students make more responsible spending decisions instead of buying impulsively?

Explain:
- one or more features you would add to the platform,
- one or more rules or limits you would set, and
- one or more reminders or messages you would show before payment.

Instruction:

The response to this CTQ should be included in the creative note, either as a branch in a mind map, a boxed section, a flow diagram, or any clear visual format that shows the proposed features, rules, and reminders.