



INFORMATION PACK

KANCIL SCIENCE COMPETITION



**WHERE
CULTURE
MEETS
SCIENCE**

SCAN HERE!



**COMPETITION DAY
12TH JUNE 2024**



[kancilsciencemalaysia](https://www.facebook.com/kancilsciencemalaysia)



www.kancilscience.my



[malaysianeducompetition](https://www.tiktok.com/malaysianeducompetition)



INTRODUCTION

Dive into the world of discovery and excellence with the Kancil Science Competition, where over 75,000 students from nearly 3,500 schools have already embarked on a thrilling scientific adventure! In Kancil 2022, there were 20,380 participants representing over 914 schools from all over Malaysia. This annual science competition open to all primary, secondary, and pre-university students. This competition serves as a crucial stepping stone for students to be selected for the national team and represent Malaysia in the prestigious International Junior Science Olympiad (IJSO) 2024.

Don't miss the chance to be part of this scientific community. Join us in the Kancil Science Competition, where the discovery knows no bounds, and the journey of scientific exploration is shared by thousands across the nation!

OBJECTIVES

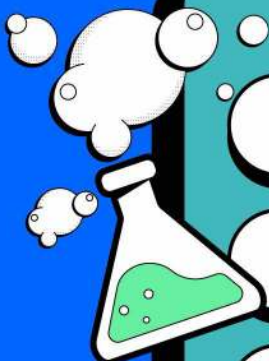
- ❖ Cultivate and stimulate an early interest in science among students through engaging and challenging questions
- ❖ Deepen understanding of scientific concepts and principles
- ❖ Provide students with opportunities to apply theoretical knowledge gained in the classroom to practical and real world scenarios
- ❖ Cultivate a culture of academic excellence by challenging students to excel beyond regular classroom requirements

STUDENT'S BENEFITS

Gain recognition for your efforts and achievements through certificates and medals which can be valuable for your academic profile

Sharpen analytical and problem-solving skills by working on competition questions that require innovative thinking

Stand a chance to represent Malaysia in the International Junior Science Olympiad (IJSO) 2024 that will be held in Romania



COMPETITION FORMAT



METHOD

Paper-based competition



QUESTIONS

30 objective questions

LEVEL OF DIFFICULTIES:

Various from EASY, MEDIUM & HARD



ANSWERING TIME

60 minutes



INVIGILATOR

Invigilated by the assigned Teacher-In-Charge

LANGUAGE

ENGLISH

BAHASA MELAYU

MANDARIN

TAMIL (for Alpha & Beta categories only)

CATEGORIES

	ALPHA	BETA	GAMMA	DELTA
Malaysian School System	Year 1, 2 & 3	Year 4, 5 & 6	Form 1, 2 & 3	Form 4, 5, 6 & Pre-U
International School System	Year 1, 2 & 3	Year 4, 5 & 6	Year 7, 8 & 9	Year 10, 11 & 12

Students should be registered into the mentioned categories according to their academic year in 2024/2025 session

COMPETITION PROCEDURE

- ❖ The students should ONLY be registered by the designated Teacher-In-Charge
- ❖ Register at www.contesthub.my
- ❖ Fill in the teacher's and school's details
- ❖ Fill in the student details in the List of Competition
- ❖ Complete the payment
- ❖ The question package and Teachers' Guide booklet will be sent to schools/centers
- ❖ On the competition day, the schools will conduct the contest at their own venues
- ❖ Schools are responsible for enforcing the regulations of the competition
- ❖ Schools will send back the OMR answer sheets to the secretariat
- ❖ The results will be announced in 3 months after the competition
- ❖ The certificate and medal (if any) will be posted to the school one month after the result is published

KANCIL SCIENCE ROAD TOUR

An exciting initiative that brings the joy of scientific discovery directly to the heart of schools across the nation! As we gear up for the Kancil Science Competition, we're hitting the road to engage with students, educators, and science enthusiasts through enlightening talks and fun hands-on activities.



ACHIEVEMENT OF THE MALAYSIAN TEAM IN IJSO

The International Junior Science Olympiad (IJSO) is an annual competition in Natural Sciences designed for students under the age of sixteen as of December 31st of the competition year. To qualify for participation in IJSO, the medalists of Kancil Science Competition from the Gamma category (aged 13, 14, and 15) will be invited to take part in the Malaysian Junior Science Olympiad (MyJSO). Following this, the top six contestants from MyJSO will be selected and undergo training to represent Malaysia in IJSO 2024. For additional information, please visit kancilscience.my.

We are thrilled to announce and celebrate the outstanding achievement of the Malaysian national team at the IJSO 2023 that took place in Bangkok. The dedicated and talented students representing Malaysia showcased their exemplary skills and knowledge, securing a prestigious Bronze Medal. Congratulations to the Malaysian team on this remarkable accomplishment, and may their success serve as an inspiration to others.

Looking ahead, IJSO 2024 is scheduled to be hosted by Romania. For more details, please visit www.ijsoweb.org.



SAMPLE QUESTION 1



The following figure shows a ruler and a magnifying glass.

Rajah berikut menunjukkan sebatang pembaris dan sebuah kanta pembesar.



Choose the sense that is used to make observations with the help of these tools.

Pilih deria yang digunakan untuk membuat pemerhatian dengan bantuan alat tersebut.

- A. Sight / Penglihatan
- B. Hearing / Pendengaran
- C. Touch / Sentuhan
- D. Smell / Bau
- E. Taste / Rasa

◆ Answer : A

A ruler is used to measure the length of an object where we need to see the scale of the ruler while a magnifying glass is used to magnify and examine small objects or details by looking through the glass of the designated object.

SAMPLE QUESTION 2



Which of the following diseases are caused by microorganisms?

Antara berikut, apakah penyakit yang berpunca daripada mikroorganisma?

- I. Tuberculosis / Tuberkulosis
- II. COVID-19 / COVID-19
- III. Conjunctivitis / Konjunktivitis
- IV. Malaria / Malaria

- A. I & III
- B. II & IV
- C. I, II, & III
- D. I, III, & IV
- E. I, II, III, & IV

◆ Answer : E

Microorganism can be classified to five categories; bacteria, fungi, protozoa, viruses, and algae. Tuberculosis is caused by the Mycobacterium tuberculosis and usually attack the lungs. Conjunctivitis can be caused by a bacterial infection causing pink eye. Malaria is a disease caused by a protozoan parasite, spread by mosquito bite. COVID-19 is caused by the virus SARS-CoV-2. Thus, these causes of the four diseases can be classified as a microorganism

SAMPLE QUESTION 3



While hiking in the forest without any compass, Surya accidentally gets separated from the other hikers. Which direction of the constellations will be helpful for Surya in finding the correct directions?

Semasa mendaki di dalam hutan tanpa sebarang kompas, Surya terpisah daripada pendaki yang lain. Antara berikut, arah buruj yang manakah akan membantu Surya dalam mencari arah yang betul?

- A. The Big Dipper points to the south direction
Biduk menunjuk ke arah selatan
- B. The Southern Cross points to the south direction
Pari menunjuk ke arah selatan
- C. The Ursa Major points to the west direction
Ursa Major menunjuk ke arah barat
- D. The Orion points to the east direction
Belantik menunjuk ke arah timur
- E. The Scorpion points to the north direction
Skorpio menunjuk ke arah utara

◆ Answer : B

Travellers and sailors used the constellations as a compass to determine their directions. There are two constellations involved which are The Big Dipper and The Southern Cross. The Big Dipper constellation always points to the north direction while The Southern Cross constellation always points to the south direction.

SAMPLE QUESTION 4



The figure shows a solar panel laid out on a roof. What is the function of a solar panel?
Rajah menunjukkan panel suria yang disusun atas atap. Apakah fungsi panel suria?



- A. Convert light energy into electrical energy
Menukarkan tenaga cahaya menjadi tenaga elektrik
- B. Convert light energy into heat energy
Menukarkan tenaga cahaya menjadi tenaga haba
- C. Convert heat energy into electrical energy
Menukarkan tenaga haba menjadi tenaga elektrik
- D. Convert heat energy into light energy
Menukarkan tenaga haba menjadi tenaga cahaya
- E. Convert electrical energy into heat energy
Menukarkan tenaga elektrik menjadi tenaga haba

◆ Answer : A

Solar panels are usually made from silicon, or another semiconductor material installed in a metal panel frame with a glass casing. When this material is exposed to photons of sunlight (very small packets of energy) it releases electrons and produces an electric charge.

SAMPLE QUESTION 5



Limestone is a sedimentary rock which is abundant in Malaysia. In 2012, the annual limestone production in Malaysia was 36 million tonnes. If limestone is heated in a kiln, it is transformed into quicklime and produced a gas that turns limewater cloudy. What is the gas?

Batu kapur merupakan batu sedimen yang banyak terdapat di Malaysia. Pada tahun 2012, pengeluaran tahunan batu kapur di Malaysia mencecah 36 juta tan. Sekiranya batu kapur dipanaskan dalam tanur, ia bertukar menjadi kapur tohor dan menghasilkan gas yang menjadikan air kapur keruh. Apakah gas itu?

- A. Ammonia / Ammonia
- B. Oxygen / Oksigen
- C. Acetylene / Asetilena
- D. Carbon monoxide / Karbon monoksida
- E. Carbon dioxide / Karbon dioksida

◆ Answer : E

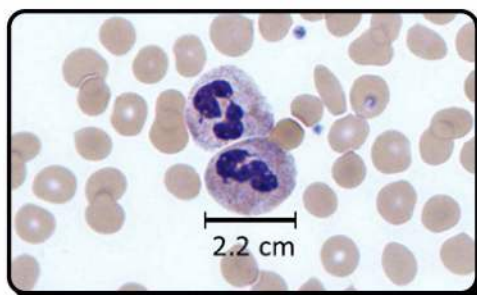
When a limestone got heated, it undergoes a chemical transformation, producing a gas known as carbon dioxide, results in the formation of quicklime. When the gas is passed through limewater, it causes the limewater to turn cloudy due to the formation of a white precipitate of calcium carbonate

SAMPLE QUESTION 6



The following figure shows the diameter of a neutrophil cell. The actual diameter of the neutrophil was 13 μm . Which calculation would give the correct magnification for the neutrophil in the figure?

Rajah berikut menunjukkan diameter sel neutrofil. Diameter sebenar sel tersebut adalah 13 μm . Antara berikut, kiraan manakah yang akan memberikan pembesaran yang betul bagi sel neutrofil dalam rajah tersebut?



- A. $\frac{13}{2200}$
- B. $\frac{22000}{13}$
- C. $\frac{2200}{13}$
- D. $\frac{13}{22000}$
- E. $\frac{13}{2.2}$

◆ Answer : B

To calculate the correct magnification for the neutrophil in the figure, we can use the formula:

Magnification = image size / actual size

By using the image size from the figure which is 2.2 cm and dividing it by 13 μm , we can determine the magnification of the neutrophil in the image.

AWARDS & CERTIFICATES

- Every participant will receive a certificate of participation issued by Kancil Science Malaysia
- Top 10% of the students will receive a gold, silver or bronze medal
- The allocation of percentage for participants is as follows:



TOP 10%
will receive a
**GOLD, SILVER &
BRONZE** award



TOP 40%
will receive an
**HONORABLE
MENTION**



REMAINING 50%
will receive a
**CERTIFICATE OF
PARTICIPATION**



IMPORTANT DATES

Early Bird Registration

1st Dec 2023 - 15th March 2024

Normal Registration

16th March - 30th April 2024

KANCIL DAY



12th June 2024

OMR Answer Sheets
Deadline

19th June 2024

Result Announcement

September 2024



REGISTRATION FEE

RM36

PER PARTICIPANT

Early Bird
10% discount

RM40

PER PARTICIPANT

Normal Registration

HOW TO REGISTER?

Registration can be made at
www.contesthub.my

Payment Method: Online payment (BillPlz) or manual payment (cheque or local order (LO))

CONTACT US

KANCIL SCIENCE MALAYSIA

c/o ARDENT EDUCATIONAL CONSULTANTS SDN BHD

100-1, Jalan 2/23A, Off Jalan Genting Klang, Taman Danau Kota, 53300, Setapak, Kuala Lumpur.

☎ 03-4142 0441 (Hotline)

☎ 018-392 0204 (Miss Suri) / 018-360 4143 (Ms. Jannah) / 010-272 7849 (Ms. Najia)

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