# KOISHIKAWA NAVIGATOR

TOKYO METROPOLITAN KOISHIKAWA SECONDARY SCHOOL Our Nation's Select SUPER SCIENCE HIGH SCHOOL

## TOKYO **METROPOLITAN KOISHIKAWA** SECONDARY SCHOOL

#### **TOKYO METROPOLITAN KOISHIKAWA SECONDARY SCHOOL**

#### SCHOOL MOTTO

DETERMINATION	Determine Your Aim
EXPLORATION	Explore Every Possibility
CREATION	Create Your Future

## WE EXPECT OUR GRADUATES TO:

• Keep a positive attitude and strong spirit as they enhance their own abilities and individuality, and never be content with their present capabilities.

**KOISHIKAWA** LIBERALISM

Broad Knowledge and Understanding

DETERMINATION **EXPLORATION** CREATION

**IGH-LEVEL MATH** 

& SCIENCE

**EDUCATION** 

r Nation's Select Sup Science High School

- Acquire an enriched education and sensitivity to represent Japan in international society.
- Apply their strengths in science, math and foreign languages to take leadership positions in their chosen fields.

## **The Principal's Address**

In 2006, our school was established from the foundation of Koishikawa High School, which was founded in 1918. Since its opening, the school motto (determination, exploration, and creation) has been proudly upheld.

Our school aims to lay the solid foundation necessary for whatever field students choose, to nurture students' abilities to their fullest extent, and to encourage them to take on leadership positions in their chosen fields. Also we inspire them to learn, think, and judge for themselves, and to apply these attitudes and abilities throughout their life.

Through interesting courses, school events, club activities, and academic projects, students gain these abilities. With the three pillars of Koishikawa Liberalism, High-Level Math & Science Education and Fostering an International Mindset, we educate students to be able to determine their aim, explore every possibility, and create their future.



#### **School History**

1918	Founded as Tokyo Prefectural Fifth Secondary School under the pre-war education system
1919	Appointment of Mr. Choshichi Ito as the First Principal
1943	Renamed as Tokyo Metropolitan Fifth Secondary School under the pre-war education system
1948	Renamed as Tokyo Metropolitan Fifth Upper Secondary School under the new education system
1949	Changed into a co-educational School
1950	Renamed as Tokyo Metropolitan Koishikawa High School
2004	Began preparation to become a Six-year Secondary School
2006	Renamed as Tokyo Metropolitan Koishikawa Secondary School Designated as a Super Science High School (SSH)
2011	Renewed as an SSH for a Second Term
2017	Renewed as an SSH for a Third Term
2018	100th Anniversary

# **KOISHIKAWA LIBERALISM**



## Through applying their strengths in science, math and foreign languages, students are expected to take leadership positions in their chosen fields.

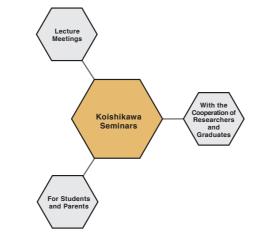
Our school focuses on the importance of developing vast and profound knowledge. Every student studies both science and humanities equally. There are no tracks such as a science-centered track, or a humanities-centered track. All Koishikawa students also study Koishikawa Philosophy I to VI, a research project which nurtures problem-solving and decision-making abilities. Students also learn how to present their research.

#### **Koishikawa Seminars**

Koishikawa Seminars are held several times a year, where world-class researchers give lectures with the aim of inspiring students to know and learn more deeply.

#### **Second Foreign languages**

4th, 5th and 6th graders have the option of learning an additional language (Chinese, German, or French). About 70% of 4th graders take this class.



## **Curriculum which practices Koishikawa Liberalism**

#### PERIOD OF DETERMINATION Determine Your Aim

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#### PERIOD OF CREATION Create Your Future

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# **KOISHIKAWA PHILOSOPHY**



## **Explore Every Possibility through Problem-solving Activities**

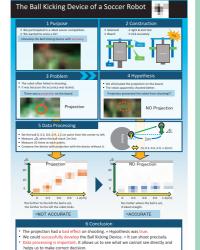
Our six-year research project inspires students to explore their interests.

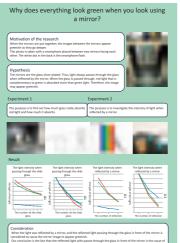
Koishikawa Philosophy is a six-year course, which is held one or two periods a week each year. with the aim of fostering the following three abilities.

- The Ability To Identify a Problem How to find a problem and make a plan to solve it
- The Ability To Explore Every Possible Avenue How to improve the plan through reflection and carry out the solution

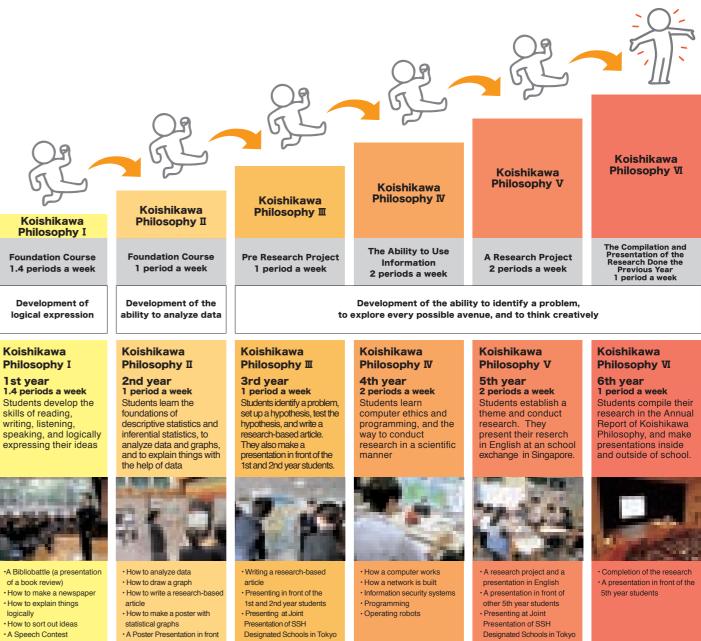
The Ability To Think Creatively How to create a new model and increase flexibility

This research project covers a wide range of topics including science, math and global issues. All Koishikawa students study in seminar groups conducted by teachers from all fields.





## **A Six-year Research Project**



of 1st year students

## List of the Seminars for Philosophy V (Changed Every Year)

#### Students select one seminar, establish a theme and conduct research.

Media Literacy	Research in Math
Contemporary Japanese Poems of 31 Syllables	Constellation – Physics in S
Analysis of the Movies During War	Research in Chemistry
Cool Japan-Japanese Culture in the World	Research in Biology

#### **Research in Cooperation with Universities**

Connections with various universities enable our students to visit professors to get guidance and advice for their research project.

Universities we have recently been in cooperation with Ochanomizu University Keio University Takushoku University University of Tsukuba Tokyo Medical and Dental University Tokyo Institute of Technology Tokyo University of Science Cardiff University

#### Global leaders with the ability to think scientifically

Research	in	Earth	Science
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- PE & Sports Space
  - Music Expressions

Global Understanding

- **Basic Parliamentary** Debate in English
- Research of Art Works (Traditional Japanese Culture)

Kanda University of International Studies Tokyo Metropolitan University Chuo University The University of Tokyo Tokyo Gakugei University Tokyo University of Agriculture and Technology Waseda University

## **HIGH-LEVEL MATH & SCIENCE EDUCATION**



## Students elevate their science and communication skills and learn how to solve problems on their own.

The Ministry of Education, Culture, Sports, Science and Technology has designated our school as one of our nation's select Super Science High Schools. We aim to foster high-level students who will lead scientific technology in Japan into the future.

#### **HIGH-LEVEL SCIENCE EDUCATION**

Students learn physics, chemistry, biology, and earth science from specialized teachers.

They learn from basic to advanced concepts with a lot of laboratory work and observations. They continue to study these four fields at an equal balance in order to develop a broader point of view.

Grades		Advanced Sc	ience Subjects	
1st year	Adv. Physics 1	Adv. Chemistry 1	Adv. Biology 1	Adv. Earth Science 1
2ndyear	Adv. Physics 2	Adv. Chemistry 2	Adv. Biology 2	Adv. Earth Science 2
3rd year	Adv. Physics 3	Adv. Chemistry 3	Adv. Biology 3	Adv. Earth Science 3
4 th year	Adv. Physics 4	Adv. Chemistry 4	Adv. Biology 4	Adv. Earth Science 4
5thyear	Adv. Physics 5	Adv. Chemistry 5	Adv. Biology 5	

#### HIGH-LEVEL MATH EDUCATION

In the 1st and 2nd year, students study foundation of algebra and geometry. At the end of the 2nd year, they have completed junior high school mathematics, allowing them to study advanced math throughout the rest of their time at Koishikawa

KOISHIKAWA LIBERALISM

Students are divided into smaller groups to allow them to achieve their full potential

Grades	Advan	ced Math Subjects
1 <sub>st</sub> year	Adv. Algebra 1	Adv. Geometry 1
2ndyear	Adv. Algebra 2	Adv. Geometry 2
3rd year	Adv. Algebra 3	Adv. Geometry 3
4 th year	Adv. Analysis 1	Adv. Algebra & Geometry 1
5thyear	Adv. Analysis 2	Adv. Algebra & Geometry 1

#### Efforts as a Super Science High School

Our school was first designated as a Super Science High School in 2006. In 2017, this status was renewed for a third time. We are working on various efforts in order to foster students who will take global leadership positions in science.

(1) Improving high level math and science curriculum

(2) Improving our six-year Research Project course

3 Improving programs to nurture global leaders who can take great roles in their chosen scientific fields 4 Strengthening cooperation and connections with universities **(5)** Professional development of our teachers

#### Visits to Overseas Universities

During summer vacation, students visit overseas universities, where they join lectures and experiments in scientific fields. They are also given the chance to discuss the theme of their research with professors, allowing them to gain further insight on their research project. This program inspires students to gain indepe-

ndence and creativity, enabling them to take leadership positions in the future.



#### **Open Laboratory**

After school, on weekends and public holidays, our Physics, Chemistry, Biology, Earth Science, Math and Information Science laboratories are available for students to work on independent projects.

Outside of school, students can work with the Tokyo University of Agriculture and Technology on a cooperative project.



#### Science Café

We hold lectures more than 10 times a year in cooperation with universities, private companies and research laboratories. Students choose to join the lectures they are interested in, which are held by scientists who are well known all over the world.



Students choose to compete in the preliminary session of the International Science Olympiads in the fields of Physics, Chemistry, Biology, Earth Science, Mathematics and Information Science. Some of them succeed in passing the first stage, going on to the international Science Olympiad

#### **Domestic contests**

- - · Physics Challenge



#### The International Science Olympiad

#### Student Achievements

#### International contests

- The International Earth Science Olympiad Gold Medal in 2017
- · RoboCup Junior World Tournament
  - 3rd Prize in 2017 5th Prize in 2018 2nd Prize in 2019
- · Journal of Physics D: Applied Physics
  - A student published an article in this academic journal
  - (a peer-reviewed scientific journal published by IOP Publishing) in 2018.

- · Japan Student Science Award, JSSA
- (Japan's most traditional and prestigious science
- research contest for junior high and high school students)
- School Award (2017), 3rd Prize (2017), 1st Prize (2018),
- Asahi Kasei Prize (2019), 2nd Prize (2019)
- · Super Science High School (SSH) Student Research Presentation
- The Judging Committee Chairperson's Award (2018)
- The Commendation for Education, Culture, Sports, Science and Technology (2019)
- Japanese Biology Olympics Gold Prize (2019)

  - The 2nd Challenge Silver Prize (2019)
  - The 1st Challenge Experimental Excellence Award (2019)
- The U-22 Programming Contest
  - The Minister of Economy, Trade and Industry Award (2017)
- · Certified as Super Creators in the Exploratory IT Human Resources Project
- (Those possessing outstanding capabilities who have completed the program
- are certified as Super Creators by IPA, Japan. )(2018)

# OSTERN

IIGH-LEVEL MAT & SCIENCE FDUCATION

KOISHIKAWA LIBERALISM

#### **To Develop an International Mindset**



#### 3rd Year Two-week Study Tour to Australia

Drawing on Koishikawa classes and the English Training Camp, our students stay with families in Adelaide for two weeks. They go to school with their Australian school buddies and put what they have learned into real-world practice.



#### **Study at 8 Designated Australian Schools**

In cooperation with the Department for Education and Child Development (DECD), South Australia, students go to eight designated schools. At each school about 20 Koishikawa students study together with their Australian buddies.

#### Schools

- Seaview
- Glenunga Seaton

Norwood Morialta

- Wirreanda Marryatville
- Henley
- Golden Grove

#### 5th Year Five-day School Trip to Singapore

In February, 5th-year students take a school trip to Singapore, visit schools, present research posters and have discussions in English with students at four different schools.



## **Developing Global Citizens with Real-World Projects**

Second year students attend a three-day English training Camp in Tokyo, third year students join a two-week study tour to Australia, and fifth year students take a school trip to Singapore. In addition, Koishikawa hosts visiting students from overseas schools. These experiences allow our students to develop a global perspective.

#### **English Education**

Our English Education is not aimed at passing entrance exams but at developing confidence to interact with the wider world

We see English classes as a stage for communication where we practice recitation, drama, debate, and discussion. Classes are divided into smaller groups for effective practice and retention. Our teaching staff includes native speakers from a variety of countries to foster a truly global understanding of English. Students aim to become skilled enough to gain an English language qualification.





Students visiting from overseas take part in everyday

classes. There are also opportunities for formal debates with 4th and 5th-year students. Our students also compete in the National Debate Competitions.

In 2017, one of our teams won 5th place in the

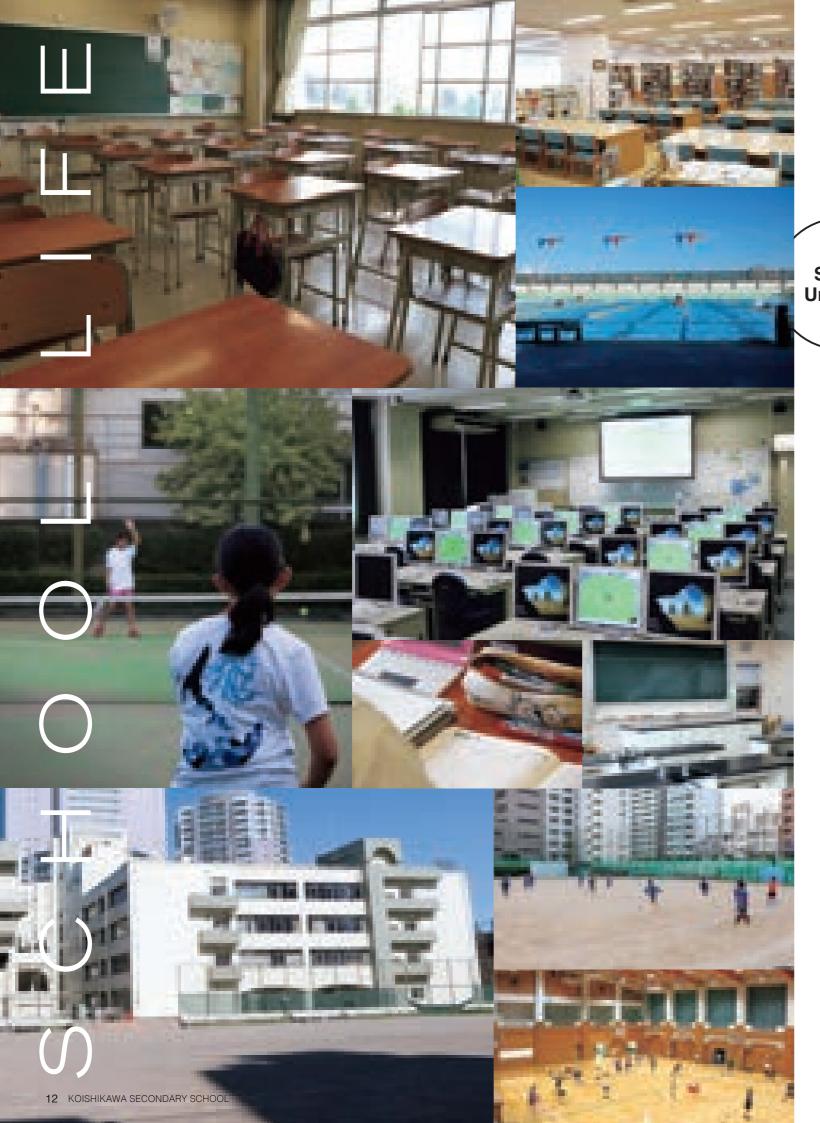
national competition (the 12th All Japan High School

#### 4th and 5th Year Cultural Exchange with Visiting Overseas Students

English Debate Tournament)

Koishikawa hosts visiting students from overseas schools. They take part in everyday classes and club activities. This helps Koishikawa students to develop a global perspective.





# School life helps develop students' abilities to their full extent through interesting courses, school events, club activities, and committees.

What we aim for in the first three years is to respect our students' independence and sensitivity, which will be important later in Koishikawa life, while helping them to learn basic social rules. For the latter three years, students become more and more independent and responsible, and thus are expected to take leadership roles, explore their interests, and create their own culture.

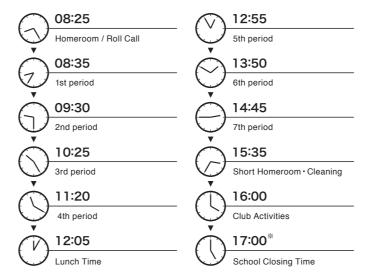


#### Seven Classes Every Day

Our school has seven classes in a day; each class is 45 minutes. As a result, we have 34 to 36 hours of classes a week.

#### **Class-first**

Classes are important at Koishikawa. To confirm the content of the class, assignments are usually given after each class. Students generally study for two hours every day at home.



\* Regarding club activities, students can stay at school until 6 p.m. if allowed by the teachers. In that case, school closing time is 6:30 pm. School uniforms are worn daily from the first to the third year. Girls can choose from two types of skirts and one type of trousers, boys can choose between two types of trousers. Both boys and girls can choose from two kinds of ties. We have an official sweater and vest.

In the fourth year, uniforms become optional, allowing students to wear any clothes that are appropriate for the class. On formal occasions, all the students are required to wear uniforms or formal clothes.

For the first three years, students wear uniforms. For the latter three years, students can wear whatever they like.



## **CLUB ACTIVITIES**

## Through club activities, students explore their interests. These activities strengthen the ties that bind all the Koishikawa students together.

Under the spirit of DETERMINATION, EXPLORATION, and CREATION, "Play a lot. Sleep a lot. Study a lot." has been the ethos for almost 100 years, and many students are devoted to their club activities. More than 90% of the students are in one or two clubs. (We have 17 athletic clubs and 21 cultural and academic clubs)

<u>Athletic Clubs</u>			
Soccer	Rugby	Soft Tennis	Regulation-ball Tennis
Rubber-ball Baseball	Track and Field	Basketball (Boys)	Basketball (Girls)
Volleyball (Boys)	Volleyball (Girls)	Badminton	Lacrosse
Judo	Kendo	Table Tennis	Dancing
Swimming			
Cultural And Academic Clubs			
Karuta Tournaments	Philharmonic Orchestra	Chorus	Brass Band
Music Band	Folk Songs	English	Cooking
Manga	Shogi and Chess	Drama	Art
Tea Ceremony	Flower Arrangement	Literature	Physics
Chemistry	Biology	Astronomy	Computer
Mathematics			

## SCHOOL EVENTS

In September, we have three school events in a row. The School Talent Show, Sports Festival, and the School Cultural Festival. The specific feature of these events is that students think for themselves and create the events on their own initiative. School Event Week is the most time-honored traditional event in Koishikawa. During School Festivals, 1<sup>st</sup> and 2<sup>nd</sup>-year students make displays in a classroom, 3<sup>rd</sup> to 6<sup>th</sup> year students perform dramas.

April	●1 <sup>st</sup> -year Entrance Ceremony	Orientation •1	<sup>st</sup> - 6 <sup>th</sup> year One-day School Excursion
May	<ul><li>Election for members of the Student</li><li>Sports Festival Opening Ceremony</li></ul>	t Council	●Mid-term Examinations
June	<ul> <li>1<sup>st</sup>-year School Camp</li> <li>Sports Festival Preliminary Session</li> </ul>	Work Experience	●Students' General Meeting
July	<ul><li>Term Examinations</li><li>SSH Student Research Presentation</li></ul>	wa Seminar n at Koishikawa	<ul><li>Club Activity Camp</li><li>Supplementary Classes in Summer</li></ul>
August	●3 <sup>rd</sup> -year Two-week Study Tour to A	ustralia	●4 <sup>th</sup> -year Volunteer Activities
September	●School Event Week (School Talent S	Show, Sports Festiva	l, and School Cultural Festival)
October	●4 <sup>th</sup> -year Two-day Emergency Drill	●Mid-term	n Examinations
November	●1 <sup>st</sup> -year Career Guidance by Profess	sionals $ extsf{0}2^{ extsf{nd}} extsf{-year}$	Three-day English Training Camp
December	<ul> <li>Term Examinations</li> <li>Koishikawa Seminar</li> </ul>	5 <sup>th</sup> -year Lectures by	University Professors
January	●NOISHIKawa Seminar		
February	●5 <sup>th</sup> -year Five-day School Trip to Sing	gapore $ extsf{0}1^{st} - 3^{rd}$	year Chorus Concert Competition
March	•Final Examinations •Graduat	ion Ceremony	●Koishikawa Seminar

## TOKYO METROPOLITAN KOISHIKAWA SECONDARY SCHOOL

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