# Living, Learning, Growing Up in Muroto UNESCO Global Geopark



Kochi Prefectural Muroto High School -School Initiatives Utilizing Global Geopark Network-

Kokona, Haruto (3rd year) Anji, Ayami, Rino, Sota, and Ayato (2<sup>nd</sup> year)



### **Summary of Today's Presentation**

### **1. Muroto High School Basic Information**

- History of the School
- Launching a joint education program to develop school original educational curriculum aided by MEXT
- 2. Establishing High Schools Network among UNESCO Global Geoparks
  - Educational Projects on International Days
  - Exchange project with other UGGps

### 3. Collaborative Research Projects with Muroto UGGp

- Geohazard Risk Management
- Development of Universal Designed Guided Tours and Promotion Tools

### 4. Summary

- To be main actors in the community

### **Muroto High School Basic Info.**

### Visions: Together with Community

In harmony with the school motto, "Truth, Goodness, and Beauty" (真善美)

### Missions:

- 1) Being proud of their hometown
- 2) Realizing future path and dream
- 3) Contributing to local development

### Number of Students:

1<sup>st</sup> year 49 students 2<sup>nd</sup> year 33 students = total 104 students 3<sup>rd</sup> year 22 students





### **Muroto High School Basic Info.**

### **Brief History**

- 1946 : Establishing the School
- 2011 : Introducing Geopark Studies as a school official curriculum
- 2017 : Founded Student's Association of Disaster Prevention
  - Earthquake and tsunami with 80% chance of occuring in the next 30 years
- 2019 : Launching 3-year Education Reform Project aided by Ministry of Education, Culture, Sports, Science and Technology
- 2021 : Signing the partnership agreement with Muroto Geopark Promotion Committee
- 2022 : Co-organizing 'International High School Students' Symposium on UNESCO Global Geoparks' in 2022 with Muroto UGGp
  - Muroto UGGp Youth Ambassadors, appointed among MHS alumni

2023: Holding a sistership exchange program with students from Langkawi UGGp





## **Muroto High School Basic Info.**

### **Education Reform Project (3-year Project)**:

[Background Situation of the School]

- Decreasing the number of students around FY2017
- In FY2019, the number of students was less than 100
- [Applying aided project to reform the school curriculum]
- "High School Education Reform Promotion through Collaboration with Local Communities," aided by Ministry of Education, Culture, Sports, Science, and Technology was launched as a joint educational development project with Muroto UGGp between FY2019 and FY2021. (Approx. 12,000,000 JPY for 3 years)

### AIM

- Developing cross curricular programs on the basis of Geopark ideals (utilizing Geopark's global network)
- Developing sustainable members of the community through the school curriculum

Please enjoy students' presentations of their successful activities!

### Making Actions on International Days (Geopark × English Class)

- Earth Day and APGN Week since 2020
- International Day for Disaster Reduction since 2020
- International Geodiversity Day since 2022

### AIM

- Studying about Muroto based on the topic of each International Day
- Sharing Muroto's activities, situations, students' actions with other areas' students
- Case studies to know deeply about Muroto—finding value of local resources



### Exchange Programs with other UGGps since 2019

<u>Overseas</u>: Langkawi UGGp (Malaysia), Satun UGGp (Thailand) <u>Japan</u>: Toyako-Usu UGGp, Itoigawa UGGp, San'in Kaigan UGGp, Oki UGGp, Unzen Volcanic Area UGGp, Hakusan Tedorigawa UGGp

Goals:

- 1. Knowing differences between Muroto and other places
- 2. Finding pros and cons of Muroto

Comparing between Muroto and other places and finding Muroto's good parts and challenges. These challenges will be next topics for our research projects for achieving sustainable management of this town.



### Sistership Exchange Programs with Langkawi UGGp and Satun UGGp in 2022

Participant schools: Muroto High School, 2 schools from Langakwi, 1 school from Satun Visiting geosites and tourist attractions, experiencing activity programs, and participating in sharing sessions

### **Differences between Muroto and Langkawi**

Muroto: Maintaining the high quality of the ocean water Langkawi: Working actively on vegetation conservation





### Sistership Exchange Programs with Langkawi UGGp in Muroto

- Experiencing Japanese calligraphy class
- Sharing session about each Geopark's basic information
- Guided tour of Tsunami Evacuation Shelter
- Experiencing geo-cruise
- Having dinner together (Halal BBQ)

### Finding cultural differences with Langkawi

Langkawi students used their hands when they have meals.

 $\rightarrow$ Noticed that eating habits reflects cultural differences of each country.



# International High School Students' Symposium on UNESCO Global Geoparks in 2022

### Theme : What High School Students Can Do to Create Sustainable Communities Objective:

To provide an opportunity for high school students from Geopark areas (including aspiring Geopark) in Japan and overseas to deepen their understanding of the region and enhance pride in their hometowns by sharing their research and school activities and exchanging opinions, and to consider solutions to the problems facing the region.

### **Three Sub Sessions:**

1) Geo-Conservation, 2) Disaster Prevention, 3) Local Engagement

### Participants:

[UGGp]Itoigawa UGGp, Oki UGGp, Toya-Usu UGGp, Langkawi UGGp, Bohemian Paradise UGGp [aUGGp] Nanki Kumano aUGGp,

[National Geopark] Kirishima Geopark, Tosashimizu Geopark, Miyoshi Geopark Plan





#### **Declaration**

The region where we live faces all kinds of challenges such as natural disasters, tourism, changes in the natural environment, declining population, and aging society. We are thinking about how to solve these problems in cooperation with the local community. In order to solve local problems, we need to understand the history, culture, industry, geology, topography, and other aspects of our own community from multiple perspectives.

We, as high school students, are responsible for spreading the knowledge we have gained in this way to the entire community. Each of us must be aware of these issues, and this will lead to an increased awareness of regional issues throughout the region. We declare at this exchange meeting that we will not continue to be in the position of being taught or protected, but will continue to be the main actors in our respective communities.

February 4, 2022

## **Collaborative Research Projects with Muroto UGGpc**

### **Geohazard Risk Management:**

FY2017: Established School Disaster Prevention Committee, composed of students [AIM]

- 1) Raising awareness of both students and local residents for preparation for the coming earthquake and tsunami
- 2) Considering what role to take as a high school student to manage/mitigate risks after natural hazards

### Sleeping over at Muroto Global Geopark Center in 2021





A group of students stayed a night at Muroto Global Geopark Center, a municipal evacuation shelter with evacuation kits and foods. No electricity, no water, no gas, no comfortable bed... Next morning, we studied about smooth and safe management of evacuation centers.

### Town walking study on evacuation route and facility in 2021

- Walking the town with a hazard map and checked the route and evacuation facilities



### Working with elementary school kids for better environment

[Historic records of Nankai Earthquake] 1605 Feb., 1707 Oct., 1854 Dec., 1946 Dec. (winter season)

Not enough preparation for earthquake happening during summer (31~33°C during a day in Aug.)

Making a paper fan with local elementary school kids and trying to ease evacuee's stresses even a little bit



# Development of universal designed guided tour and promotion tool in 2021, 2022 (Geopark × Social Welfare)

### Universal-designed guided tour

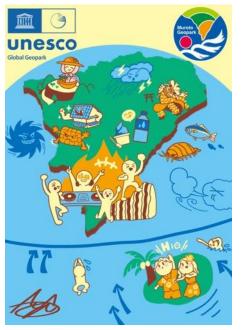
- Geopark Studies class and Social Welfare class worked together to develop a tour route
- Geopark Studies class did a guide while social welfare class supported a tour participant
- Created a video of virtual tour at Cape Muroto in sign language



For visually impaired people (Project in FY2021)



これはハンレイ岩と言って、マグマが地下深くで ゆっくり冷え固まりできた石です。 の岩も室戸の特徴的な地質を示す石のひとつです <u>Virtual tour in sign language</u> (Project in FY2022)





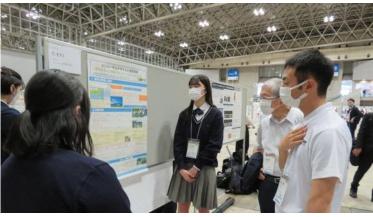
### Universal-designed promotion tool

[AIM] Conveying message over any borders

- Developed a poster, conveying messages of Muroto UGGp: "Live on moving land in harmony with nature"
- Displayed the poster at Muroto Global Geopark Center and did questionnaire survey for visitors to improve the content.

### Establishing High Schools Network among UGGps Sharing activities and research results







#### APNG Symposium in 2022 (Satun UGGp)

- Presenting about school projects of geohazard risk management
- Three students and one teacher participated in the Symposium

#### Japan Geoscience Union Meeting 2022

- Sharing about research projects on developing universal guided tour
- Achieved an honorable mention
  \*Muroto High School has continuously participated in this academic conference since FY2019.

#### Muroto City Council in 2021

- Attending the Muroto City Council to share a joint education program with Muroto UGGp and its results
- Aiming to raise awareness of Muroto city residents for local development

### **Being main actors**

for establishing sustainable local community for our future





breathtaking natural beauty, rich cultural heritage, and traditions

Foundation for our life in Muroto