



Although we only encounter mathematics in the classroom, we know it is everywhere. For example, some of them out the classroom is nature and history. We have decided to research how we use mathematics in nature and history. We are going to make some calculations with our students for a week in nature. Then, we are going to go to historical places or museums in our city for a week in order to research mathematics in the past. Moreover, we are going to visit some museums in the world virtually in order to examine mathematical structure. In the end, students will find connections between nature and history.

The Working Plan of Project

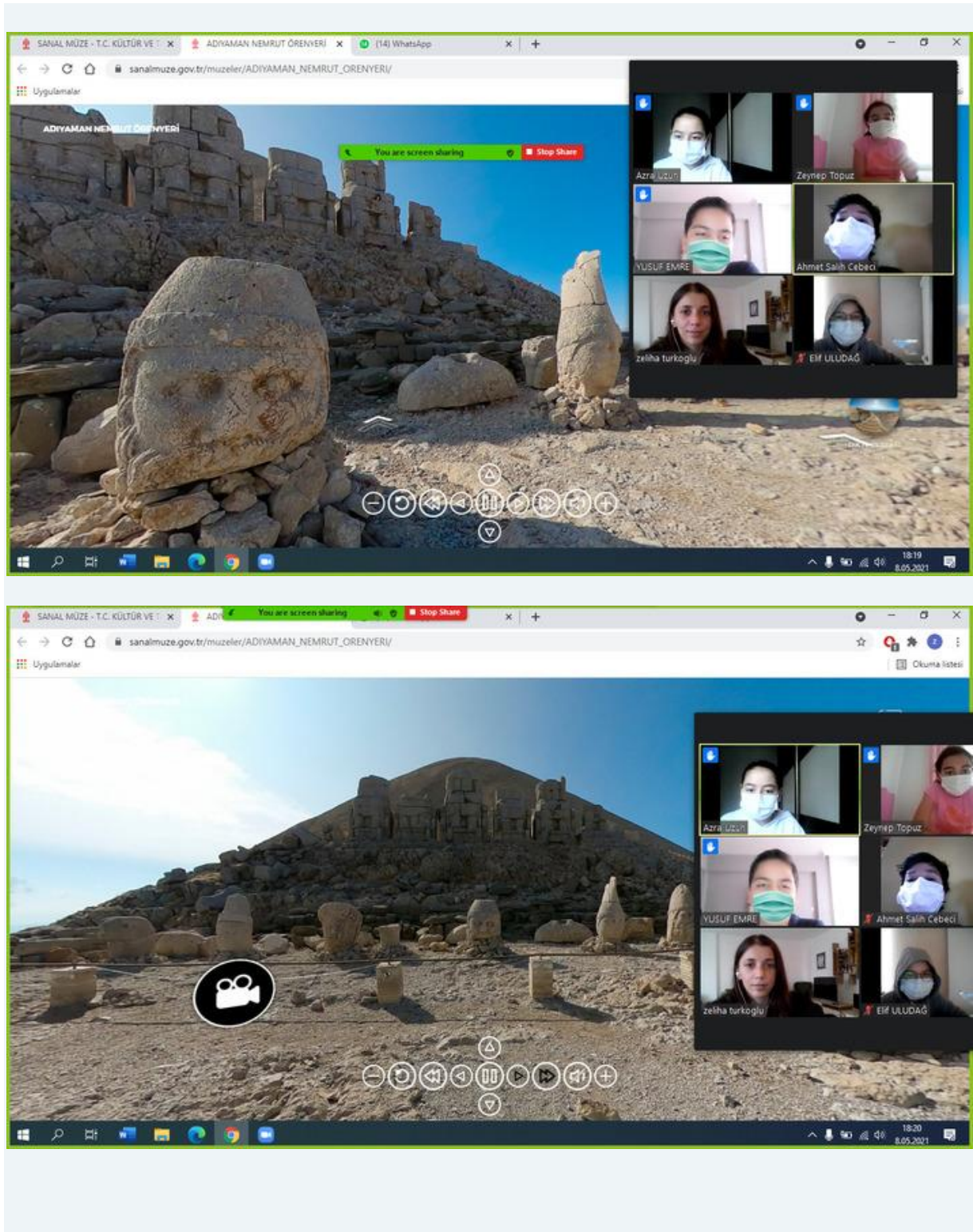
ARCH ACTIVITIES	<ul style="list-style-type: none"> • Looking for partners • Whatsapp group is set up • Introducing with partners on online meeting via Zoom and making distribution of tasks • Social media accounts are opened. • Informing students about the Project. Then, parent permission certificates are wanted from students.
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	<ul style="list-style-type: none"> • Students are informed about eSafety • Students are saved to twinspace system and are given password to students • Designing logos. Every student designs their school's logo. That is, every school must have one logo representing their own school. • The logo of project is chosen among schools' logos as surveying.(by CANVA) • Every school prepares their own posters and surveying for them. • Students and teachers introduce themselves by videos or other tools. (by BITMOJI CLASSROOM AND CHATTERPIX) • The introduction of history and nature of cities are prepared by students and teachers
MAY ACTIVITIES	<ul style="list-style-type: none"> • Pretest are prepared for students and sent to them. • Visiting one historical place (museums, and the oldest place of your city) with your students. Visiting is realized virtually because of pandemic. Taking notes are took about place. Especially mathematical issues (shapes or other topics). Page in twinspace related to this is opened and the findings of your students are written. • Every student choose one tree.They find the diameter and radius of tree by formula of disk's circumferences.They find the height of that tree by measuring shadow lenght from ratio or other methods. • Activities like competition are done in Nature if there is no risk for Covid-19 (For example, related to GPS usage) • Mixed groups are constituted by ancient mathematician names. Every mixed group reseach their own mathematician and make activities. • Volunteer students research about ancient civilizations' mathematics.
JUNE ACTIVITIES	<ul style="list-style-type: none"> • Competition with all students about endemic plants and animals in ZOOM by KAHOOT. • Preparing the common product for World Environment Day. • Post test are sent to students. • Every student desings bookmarks to send your friend in the project. • Conversations among project members. • Evaluations



OUR VIRTUAL TOUR





WE RESARCH Muhammed İbn Musa El Harezmi



MATHEMATICS IN NATURE



$$\frac{\text{Beyaz kuyun}}{\text{Kahverengi koyun}} = \frac{\text{Beyaz koyun}}{\text{Kahverengi koyun}}$$

$$\frac{2.45 \text{ cm}}{2.85 \text{ cm}} = \frac{7}{0.45 \text{ cm}}$$

$$\frac{2.45 \cdot 1.42}{2.85} = 7$$

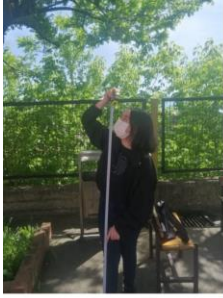
$$7 = \frac{13.703}{2.85} \approx 4.80$$

Beyaz koyun 4.80 cm'dir.



Elif,
 Nurdan and
 Ahmet
 Orhan Oğuz
 Secondary
 School





AZRA
Nuranda Ahmet Orhan Oğuz
Secondary School



Saat: 15:20

Baun boyum: 147 cm
Çalgeun boyu: 140 cm
Ağacın gölgesi: 555 cm
Ağacın boyu: ?

$$\frac{\text{Baun boyum}}{\text{Baun gölgesi}} = \frac{\text{Ağacın boyu}}{\text{Ağacın gölgesi}}$$
$$\frac{147 \text{ cm}}{140 \text{ cm}} = \frac{\text{A. boyu}}{555 \text{ cm}}$$
$$147 \text{ cm} \times 555 \text{ cm} = \text{Ağacın boyu} \times 140 \text{ cm}$$
$$81.585 \text{ cm} = 140 \text{ cm} \times \text{A. boyu}$$
$$\text{A. boyu} = 81.585 \text{ cm} \div 140 \text{ cm}$$
$$\text{Ağacın boyu} = 582,75$$

ZONGULDAK'S ENDEMIC PLANTS



WE MAKE A BOOKMARKS FOR OUR PARTNER

