

## "Measuring the distance and height which cannot be measured." Practical skill tournament

June 1st (Wed.)

Top Gun Science and Mathematics Club was held at Fuzoku Hamamatsu Junior High School. Seventy Fuzoku Hamamatsu Junior High students attended  $(3-3^{rd}$  yr. 3,  $20-2^{nd}$  yr.,  $47\& -1^{st}$  yr.).

## June 1 (Wed.) Practical Skill Tournamen

3-4 students form a group and measure the length there strides. Without using any measuring tapes, each team measures the distance between two points that are out of reach by using their own devised angle surveying instruments.

Q.1 Find out the height of the gymnasium from floor to ceiling metal fittings. Q.2 Find out the length of the three flags on the stage (from one end of the first flag to the other end of the third flag).

# Competition Location $\cdot$ $\cdot$ Gymnasium

At the competition each student had to find out the measurement of his / her stride. The lengths of strides vary according to each person, but when one person's strides are measured, they are pretty constant. 20 meters has been marked out on the gymnasium floor. Each students counted his / her strides from one end to the other to find out the measurements of each strides.



< opening ceremony>



<stride measurements>



dws<team involvement in the tournament>

By the cooperation of Suyama Construction Co., Ltd., using the laser distance meter, the correct measurement were determined. Ans.1-9.8m Ans.2-4.2m





looking into laser distance surveying equipment at the end of the tournament >

#### Interviewing the Principal

I was amazed at the ingenuity of the students` well device surveying instruments. I thought the students showed the same seriousness and earnest heart for this tipe of competition as they have towards athletic tournament. Creating their own tools like this was a great experience for the students and will be of use to them in the future. Each surveying instrument was uniquely different. This will also be productive for their future. It would be very good for the students to learn from observing each others` creation. (Principal Yosuke Kominami)

#### Student Reporter Editorial Department

I believe this was a new experience for most of the 1<sup>st</sup> yr. students. But after listening to Specially appointed Prof. Yamamoto (leader of the Top Gun Lab.), I thought that all the students were actively involved. I think that was great! There was great teamwork in every activity (stride measurements, the 20-meter walk, measuring the height of the gym from floor to ceiling, and the length of the three flags). I hope we can show the same teamwork in future tournaments.

I would like to thank Suyama Construction Co.,Ltd. and Shizuoka University, for making this possible.

### Top Gun Journal reporters and photographers Junior High 1<sup>st</sup> yr. Yoshinobu Aoshima & Seiya Kaneko