

Let's make a Road on which a marble rolls as long as possible!

1. Time Table

- 13 : 45~13 : 50 (5min) Introduction·preparation
- 13 : 50~14 : 30 (40min) Make a Road
- 14 : 30~14 : 40 (10min) Break
- 14 : 40~15 : 15 (35min) Contest
- 15 : 15~15 : 25 (10min) Review·Clean up

2. What you are going to do

Please make a road on which a marble rolls as long as possible in groups of four or five (one of them may be a sister school student or teacher). You can use only the materials and instruments that will be provided. You must finish making a road for rolling a marble in 40 minutes.

After that, we will ask you to roll a marble. You will compete in the length of time required for a marble to touch the goal line when you roll it from the starting line on a course.

3. Materials and instruments that will be provided to each team (You cannot use any other thing.)

- 3 handicraft boards→You have to make a road by using 1 handicraft board.

You can use the remaining two for producing experimental road.

- a Scotch tape
- a glue
- a marble
- sticky notes
- a pair of scissors
- a ruler

4. Regulations

- (1) You must make a road by using the materials and instruments that will be provided. (except the marble and sticky notes) But you can choose and use what you need from the materials and instruments.
- (2) You must make a road within the desk on which you work and make it portable.
- (3) You need to clarify the goal line on a road by using sticky notes. And you need to make it so that a marble can pass through the goal line. Any place will do for the start line on the road.
- (4) The road must stand by itself. And you have to make the foundation of the road by using a handicraft boards. (You cannot support a road with your hands and fasten it on the surface of a floor by using scotch tape.)
- (5) You cannot use Scotch tape or glue to delay the movement of the marble.

5. About the Contest

Each team participates in a contest.

① The preparation

You need to move the road to prescribed place.

② Travelling

(1) The starting signal is the utterance “Go!” from a contestant.

(2) The contestants release the marble calmly at the starting signal.

(At that time, you mustn't produce initial rate.)

(3) If a marble stops along the road, your record is “No Record”.

Within the course of a road, a marble can move upward and crash during the travelling.

(4) You can try again 2 more times if your marble deviates from the course of the road.

At that time, you mustn't retouch the course as a matter of principle.

If that's still no good, your record is “No Record”.

② Measurement

Two students will measure the time during which the marble passes through the goal line for the first time. They truncate a hundredth of a second(0.01) and use one-tenth of a second(0.1).

They regard an average value as a measured time.

Time measurement(2 students)	Write records on a blackboard(2 students)
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6. About the calculation of the score

The team which takes a longer time travelling is ranked over from the result of a measured time.

The team which has “No Record” is second on the list after ranking based on the measured time.