1. **Purpose:**

- Investigating the relationship between the acceleration of an object and the angle of the road.
- Proving that the weight of the object contribute nothing to the change of the velocity of the object.

2. **Instruments:**

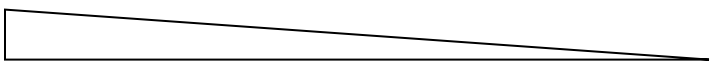
- 2 balls with different weight. Ball shape is selected to eliminate the friction force;
- 1 Ao paper to make the experimental path of 1 meter;
- A stopwatch;
- A milimeter ruler;

1.1. Setting the experiment:

Step 1: Make the experimental path of 1 meter by using Ao paper.

(con đưa cái ảnh chụp cái đường đã làm như bố chụp gửi cho con ấy nhé)

Step 2: Set up an angle line:



Step 3: By using ruler measure the length of the path and the height of the triangle

- The length of the path is hypotenus of the right triangle
- The height is the smaller leg of the triangle.

Step 4: Measure the travelling time of the ball to run all the path from the top of the triangle.

- Put the ball on top;
- Release the ball and at the same time start the stopwatch.
- Stop the stopwatch when the ball reach the end of the path.

Step 5: Record the result to the following table

Re-do this process 3 times for each height of the triangle. For only the first position, re-do this process 3 times for each balls.

Changing the height of the triangle 6 times.

Height (mm)	Sinα	Measured time				Average acceleration
		1st attemp	2nd attemp	3rd attemp	Average	
50		--	--	--		
50		--	--	--		
100		--	--	--		
150		--	--	--		
200		--	--	--		
250		--	--	--		
300		--	--	--		

The yellow cells are to be filled by the measured value. The others are filled by calculated value.

There are 2 rows for the height of 50mm. One is for first ball. The other is for second one.

2. Measured results:

Height (mm)	Sinα	Measured time				Average acceleration
		1st attemp	2nd attemp	3rd attemp	Average	
50	0.05	1.47	1.46	1.46	1.46	0.47
50	0.05	1.46	1.45	1.46	1.46	0.47
100	0.10	1.03	1.01	1.01	1.02	0.96
150	0.15	0.83	0.84	0.83	0.83	1.45
200	0.20	0.71	0.73	0.72	0.72	1.93
250	0.25	0.64	0.64	0.65	0.64	2.44
300	0.30	0.58	0.59	0.58	0.58	2.97