

School				Mark (10)
Name		HKID		
Class (No.)		Date		

A6 Moment of Inertia of a Vertical Flywheel

Answers to Preview Questions

1. _____

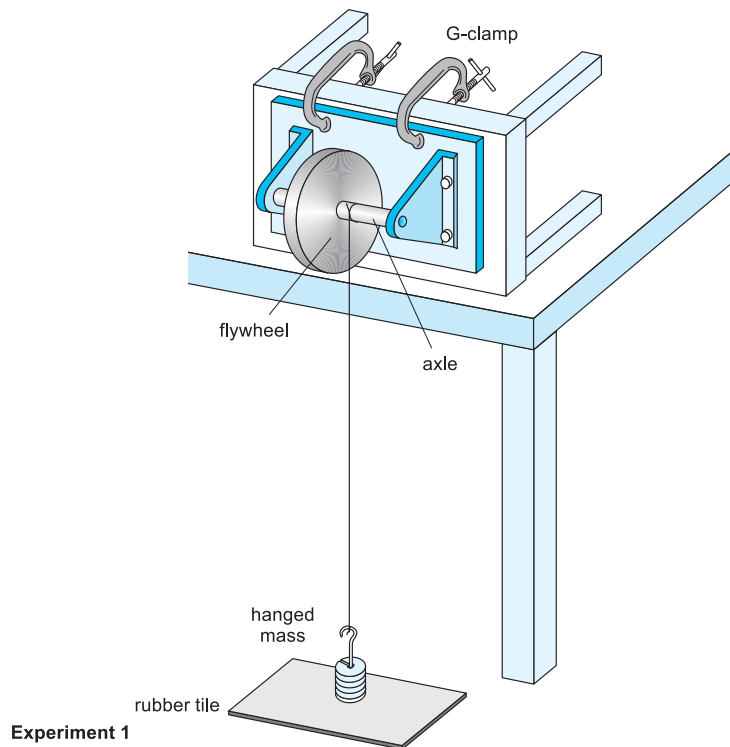
2. _____

3. _____

4. _____

5. _____

Experiment Measuring the moment of inertia of a vertical flywheel



Experiment Step 2Diameter, d_1 _____Diameter, d_2 _____

Mean of diameter _____

Radius of axle, r _____Uncertainty in measuring d _____% error in d _____ % error in r _____**Experiment Step 3**Total mass, m _____Uncertainty in measuring m _____% error in m _____**Experiment Step 4**

How can you ensure that the falling mass exerts its full turning effect on the flywheels?

Experiment Step 6Number of revolutions in winding up, N _____**Experiment Step 7**Height, h _____Uncertainty in measuring h _____% error in h _____

Table 1

	Trial 1	Trial 2	Trial 3	Trial 4	Trial 5	Mean
Falling time, t ()						
N'						

Experiment Step 10Uncertainty in measuring t _____% error in t _____

Teacher's Remark

Data Analysis

1. Calculate the moment of inertia of the flywheel about its axis.

2. Estimate the percent error in I .

Answers to Discussion

1.

2.

3.

4.

Teacher's Remark