

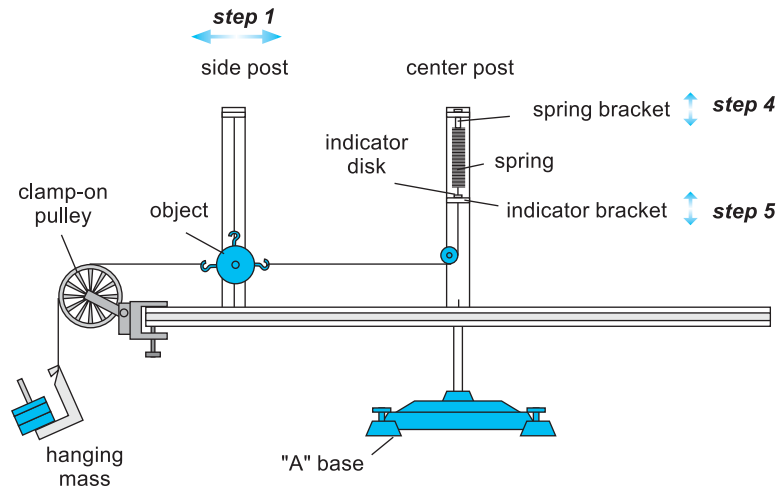
School				Mark (10)
Name		HKID		
Class (No.)		Date		

## A2 Studying Centripetal Force

### Answers to Preview Questions

- String A \_\_\_\_\_  
String B \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_

### Experiment 1 Variation of radius with period for constant centripetal force



#### Experiment 1 Step 2

Mass of the object \_\_\_\_\_

#### Experiment 1 Step 3

What is the significance of the value of the hanging mass? \_\_\_\_\_

#### Experiment 1 Step 6

What happens to the indicator disk and the object? \_\_\_\_\_

Table 1

Radius, $r$ ( )					
Time for 5 cycles ( )					
Period, $T$ ( )					
$T^2$					

**Data Analysis 1**

1. Tension in the string \_\_\_\_\_
2. Centripetal force on the object \_\_\_\_\_

Plot of  $r$  against  $T^2$ **Data Analysis 1**

4. Slope of graph \_\_\_\_\_  
Centripetal force \_\_\_\_\_
5. Comparing values \_\_\_\_\_  
Percent difference in centripetal force \_\_\_\_\_

Teacher's Remark

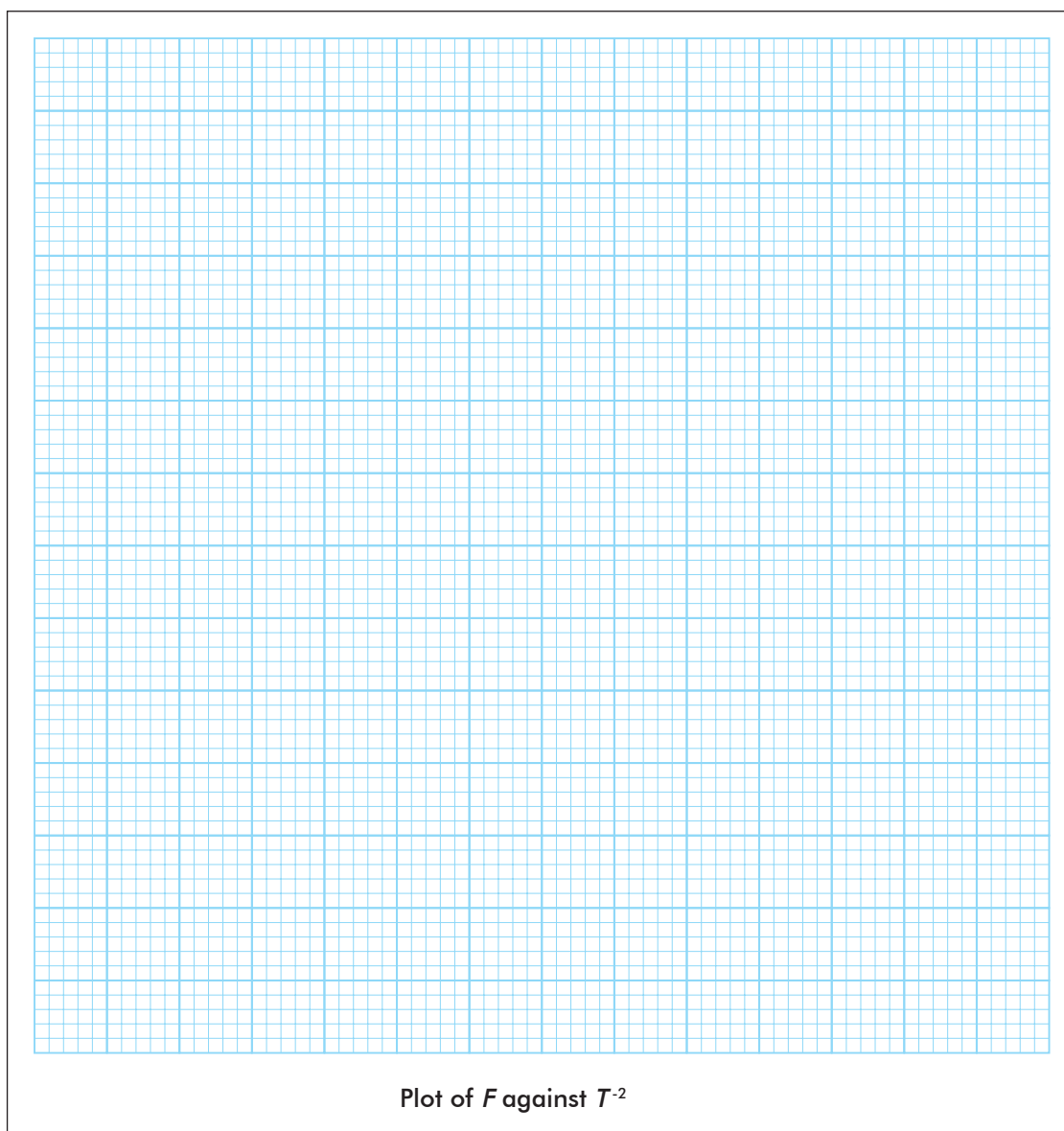
**Experiment 2 Variation of centripetal force with period for constant radius**

**Table 2**

Centripetal force, $F$ ( )					
Time for 5 cycles ( )					
Period, $T$ ( )					
$T^2$					

**Data Analysis 2**

1. Radius of circular path \_\_\_\_\_

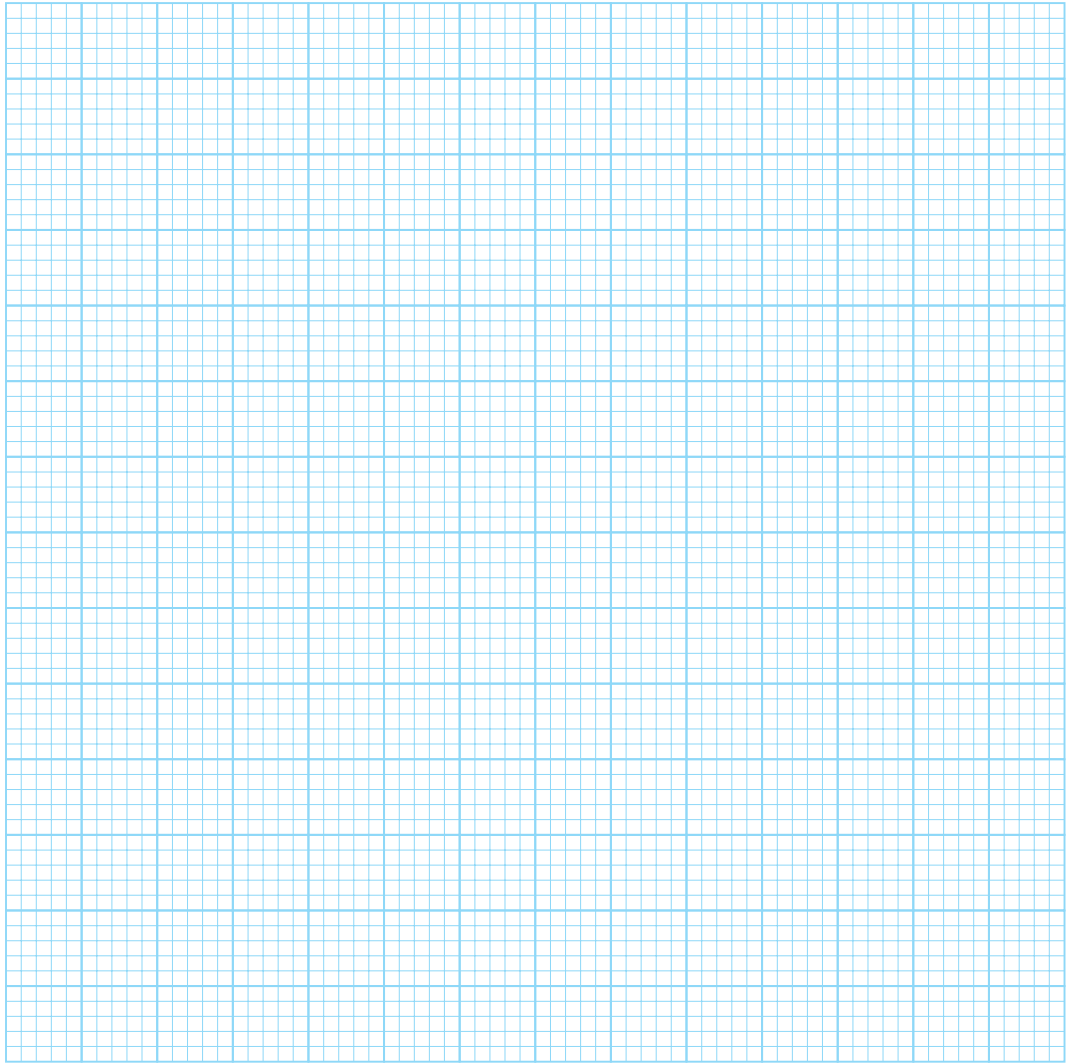


**Data Analysis 2**

3. Slope of graph \_\_\_\_\_  
 Calculated mass of the object \_\_\_\_\_
4. Comparing values \_\_\_\_\_



Teacher's Remark



2. \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

3. \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

4. \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

