Purpose (1 mark):

Hypothesis (2 marks): *If.....then.....because.....*

If the [ ] of IO_3^- increases, then the rate will...

Observations: The Effect of Concentration on Rate for the Iodine Clock reaction. (5 marks)

	Calculate	*Given*	*Calculate X-axis*	*Measure*	*Calculate*	*Calculate Y-axis*
Trial/Well #	**Solution A** Concentration immediately after mixing * $[IO_3^-]_i$	**Solution B** Concentration (initial undiluted concentration is 0.04 mol/L)	**Log $[IO_3^-]_i$** (−) Abs value	**Time** (seconds for the reaction to happen)	**Rate** $[IO_3^-]_i$ / Time	**Log (Rate)**
1		0.020		23.		
2		0.020		20.7		
3		0.020		9.7		
4		0.020		6.62		
5		0.020		4.8		
6		0.020		3.79		
7		0.020		3.16.		
8		0.020		2.9		
9		0.020		2.7		
10	0.10 mol/L	0.020	2.7	2.6		

2nd

1st

−log so its abs value

*be careful in this column! The concentration of Solution A is determined by considering both the dilution with water drops and the mixing with solution B

sig. Fig

$C_1V_1 = C_2V_2$

V_1 = 10, 9, 8 etc ↑

V_2 = 20, 20, 20 etc ↑