

Experimental Design

Read the following experimental results and answer the following questions

QUESTION ONE:

Aim: To investigate how table size affects the dissolving time of a tablet

	Tablet Size	Time (seconds)
Beaker 1	Full Tablet	90
Beaker 2	Half Tablet (x2)	60
Beaker 3	Crushed whole tablet	30

- (a) Controlled Variables: _____
- (b) Independent Variable: _____
- (c) Dependent Variable: _____
- (d) Conclusion: _____

QUESTION TWO:

Aim: To investigate how sun exposure affects the growth of a plant

	Exposure to Sun	Growth (cm)
Plant 1	No sun	0cm
Plant 2	Shade	3cm
Plant 3	Full sun	10cm

- (a) Controlled Variables: _____
- (b) Independent Variable: _____
- (c) Dependent Variable: _____
- (d) Conclusion: _____

QUESTION THREE:

Aim: To investigate how temperature affects the reaction of Mentos

	Temperature (°C)	Reaction (cm)
Cold Coke	5	12
Room Temperature Coke	15	25
Warm Coke	30	50
Hot Coke	60	100

(a) Controlled Variables: _____

(b) Independent Variable: _____

(c) Dependent Variable: _____

(d) Conclusion: _____

QUESTION FOUR:

Aim: To investigate how different surfaces affects the time it takes a toy car to travel across 100cm

Surface A (smooth)						
Distance (m)	0	20	30	60	80	100
Time (sec)	0	18	38	60	75	94

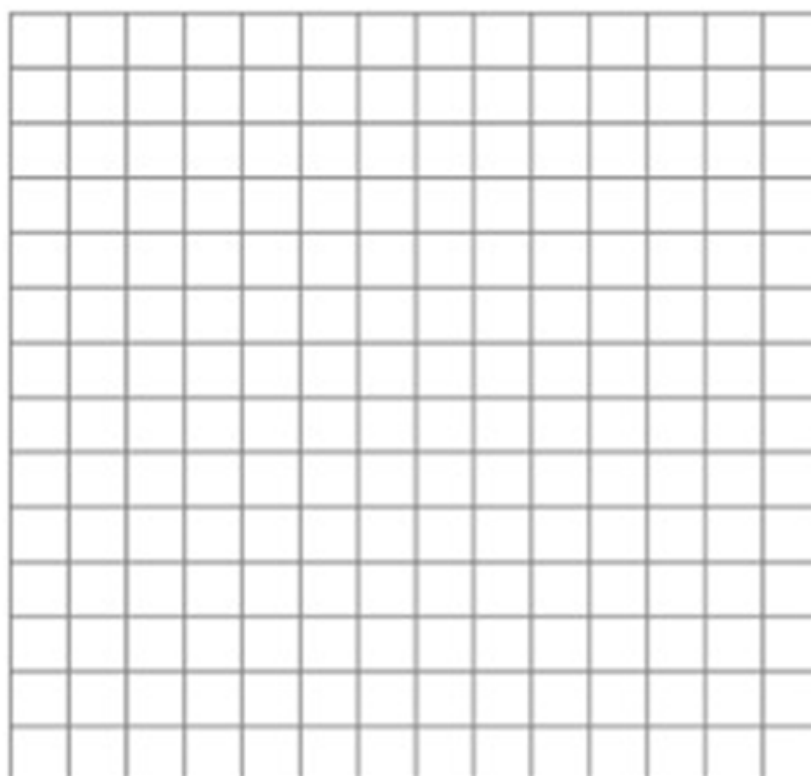
Surface B (rough)						
Distance (m)	0	20	30	60	80	100
Time (sec)	0	25	43	67	100	140

(a) Controlled Variables: _____

(b) Independent Variable: _____

(c) Dependent Variable: _____

(d) Draw a line graph to show these results



(e) Conclusion: _____

