

CASIO DATA COLLECTOR-"Manual Set-up"

NO PROGRAMMING NECESSARY! NO CALCULATOR NECESSARY

EXPERIMENT 1

PURPOSE:

**TO MEASURE THE CHANGE IN TEMPERATURE OVER A SPECIFIED TIME
(Using your hand)**

STEPS FOR "MANUAL-MODE" (No program)

Make sure temperature probe is connected to EA-100. Do not connect to calculator.

You will program it by choosing 3 built in options:

- 1) Sample Time
- 2) Number of samples to be collected
- 3) Time consideration...

OPTION RANGE/CHOICES

10 milliseconds to 60 seconds

10 to 200

(0) none, (1) absolute, or (2) relative

<u>KEYSTROKE</u>		<u>EXPLANATION</u>
1) Press [SHIFT] [MODE]		"Set-up"
2) Press [DataLOG] until "1.00sec" appears the	"Next"	Press [DataLOG] several times until you see sample time you want to use on your screen. In this case 1.00sec.
3) Press [TRIGGER]		Chooses 1.00sec as sample time.
4) Press [DataLOG] until "10" appears		Press [DataLOG] several times until you see the number of samples you want to use on your screen. In this case 10.
5) Press [TRIGGER]		Chooses 10 as number of samples to collect.
6) Press [DataLOG] until "1" appears	"Next"	Press [DataLOG] until you see the time consideration you want to use on your screen. In this case 1. 1 means time is collected as data and in this case time is stored as: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10.
7) Press [TRIGGER]		Chooses 1 as time consideration (absolute time).

ARE YOU READY???????

Put the temperature probe in your hand.

- | | |
|--------------------|-------------------------|
| 8) Press [TRIGGER] | Starts data collection. |
|--------------------|-------------------------|

WAIT UNTIL SCREEN SAYS "DONE"!

*Now view your data by pressing [DataLOG] key over and over again.

*To redo or repeat the last experiment....press [SHIFT] [RESTART].

*To transfer the data from the EA-100 to calculator...Use this program...

Receive(List1) Receive (List 2)

Data will show up in list 1 and list 2 in statistics icon.

*You may use any other probe with this manual set-up, not just the light probe.

CASIO DATA COLLECTOR

USE CALCULATOR PROGRAM TO OPERATE!

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EXPERIMENT 2

**PURPOSE: TO MEASURE THE TRACK OF A TENNIS BALL
BASED ON IT'S DISTANCE FROM THE FLOOR**

PREPARATION STEPS-

EA-100 DATA COLLECTOR

Connect Motion Detector to EA-100.

Connect EA-100 to calculator.

BALL AND MOTION DETECTOR

Place motion detector on floor or table.

Hold ball above floor or table and get ready to drop the ball.

KEYSTROKE

EXPLANATION

CALCULATOR

Turn calculator on.

Highlight "Program" Icon with arrows and press [EXE].

Highlight "Sonic" program with up/down arrows and press [EXE] .

EA-100

Press [TRIGGER] and drop ball at same time.

Watch for "done" to appear in EA-100 screen!

CALCULATOR

Press [EXE]

View results on calculator.

3 TRIALS OF TEMPERATURE EXPERIMENT

DIRECTIONS:

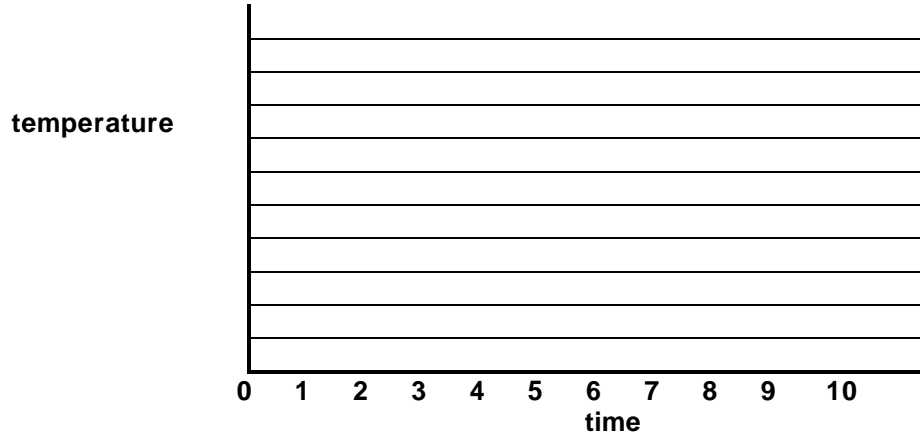
Using the Casio Data Collector, collect 10 temperature samples, at 1.0 second intervals.

Using [Data Log] key, record data in table and hand graph results.

REPEAT 3 TIMES.

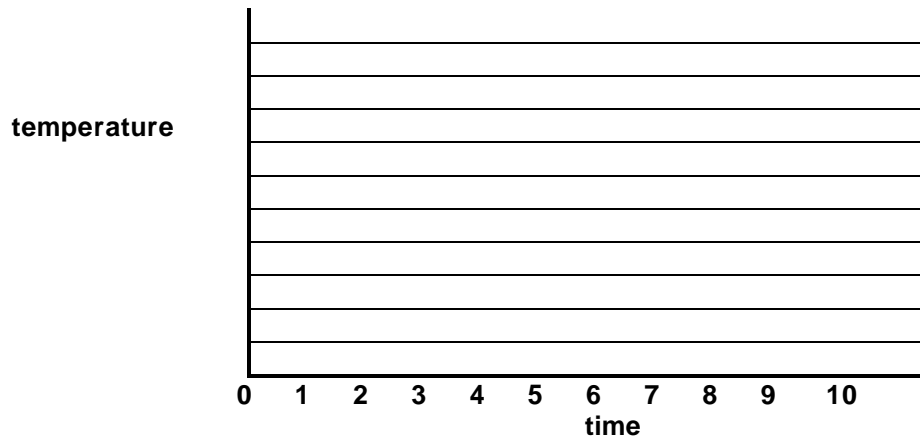
TRIAL 1

TIME	TEMP READING
1	
2	
3	
4	
5	
6	
7	
8	
9	
10	



TRIAL 2

TIME	TEMP READING
1	
2	
3	
4	
5	
6	
7	
8	
9	
10	



TRIAL 3

TIME	TEMP READING
1	
2	
3	
4	
5	
6	
7	
8	
9	
10	

