



## monitoring skin temperatures

- It is possible to use three temperature sensors, simultaneously, with one CBL2. For example, the temperatures of the forehead, arm and chest can be monitored during exercise.
- APPS → ChemBio.

```
VERNIER SOFTWARE
BIOLOGY AND
CHEMISTRY
WITH THE CBL

8/11/00 [ENTER]
```

```
*****MAIN MENU*****
1:SET UP PROBES
2:COLLECT DATA
3:VIEW GRAPH
4:VIEW DATA
5:FIT CURVE
6:RETRIEVE DATA
7:QUIT
```

```
ENTER NUMBER OF
PROBES:3
```

```
*****PROBE
*****
1:TEMPERATURE
2:PH
3:PRESSURE
4:COLORIMETER
5:VOLTAGE
6:CONDUCTIVITY
7:MORE PROBES
```

```
USE LOWEST
AVAILABLE
CHANNELS.

ENTER CHANNEL
NUMBER:1
```

ENTER and repeat for channels 2 and 3.

```
*****MAIN MENU*****
1:SET UP PROBES
2:COLLECT DATA
3:VIEW GRAPH
4:VIEW DATA
5:FIT CURVE
6:RETRIEVE DATA
7:QUIT
```

```
*****SUBMENU*****
1:MONITOR INPUT
2:TIME GRAPH
3:TRIGGER/PROMPT
4:TRIGGER
5:SINGLE POINT
6:RETURN
```

For example →

```
ENTER TIME
BETWEEN SAMPLES
IN SECONDS:5

ENTER NUMBER
OF SAMPLES:60*15
/5
```

```
SAMPLE
TIME 5.000 S
SAMPLES 180
EXPERIMENT
LENGTH 900.00 S
[ENTER]
```

1.

```

*****
USE TIME SETUP
2: MODIFY SETUP

```

```

SET Y-AXIS
Ymin=?15
Ymax=?40
Ysc1=?5

```

For example, for real-time plot,  
lowest temperature = 15°C,  
highest temperature = 40°C,  
Y scale mark at every 5°C.

```

SET Y-AXIS
Ymin=?15
Ymax=?40
Ysc1=?5

PRESS [ENTER] TO
BEGIN COLLECTING
DATA.

```

At the end of sampling →

```

TIME IN L1
CH1 IN L2(DOT)
CH2 IN L3(CROSS)
CH3 IN L4(BOX)

[ENTER]

```

```

*****
NO
2: YES

```

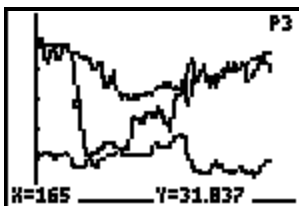
```

*****
1: SET UP PROBES
2: COLLECT DATA
3: VIEW GRAPH
4: VIEW DATA
5: FIT CURVE
6: RETRIEVE DATA
QUIT

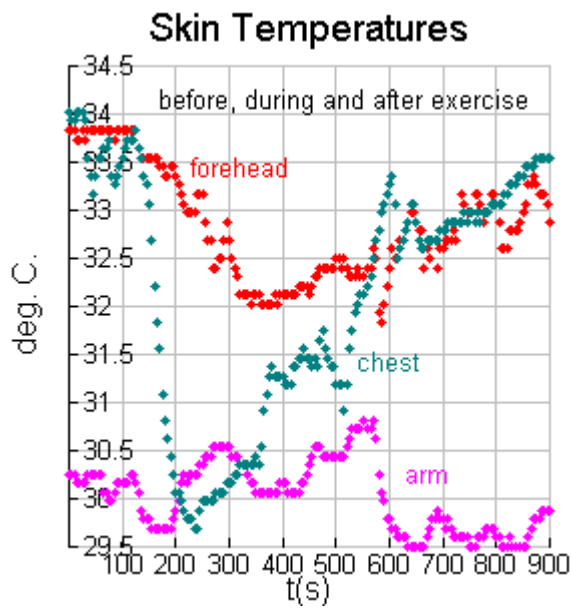
```



Example of unprocessed graph obtained,  
with three plots.



Same graph processed to use dots for all three plots.



In this example, the four data lists have been transferred to a spreadsheet (TI InterActive) and the graph produced within the sheet.