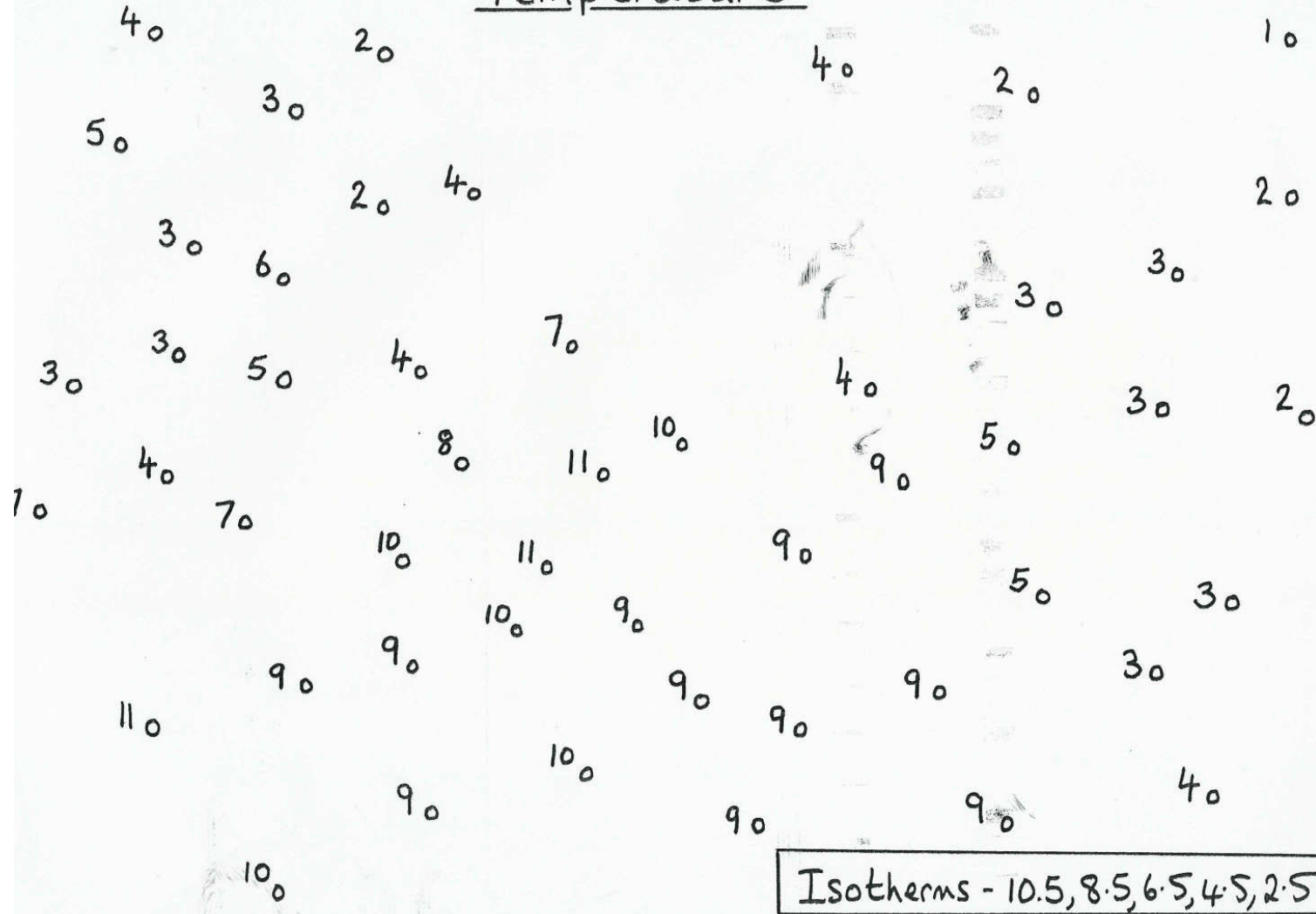


# Temperature



Drawing

## Isobars

Isobars are lines of constant pressure. Drawing the isobars reveals features (eg highs, lows, ridges and troughs) which help us understand the weather.

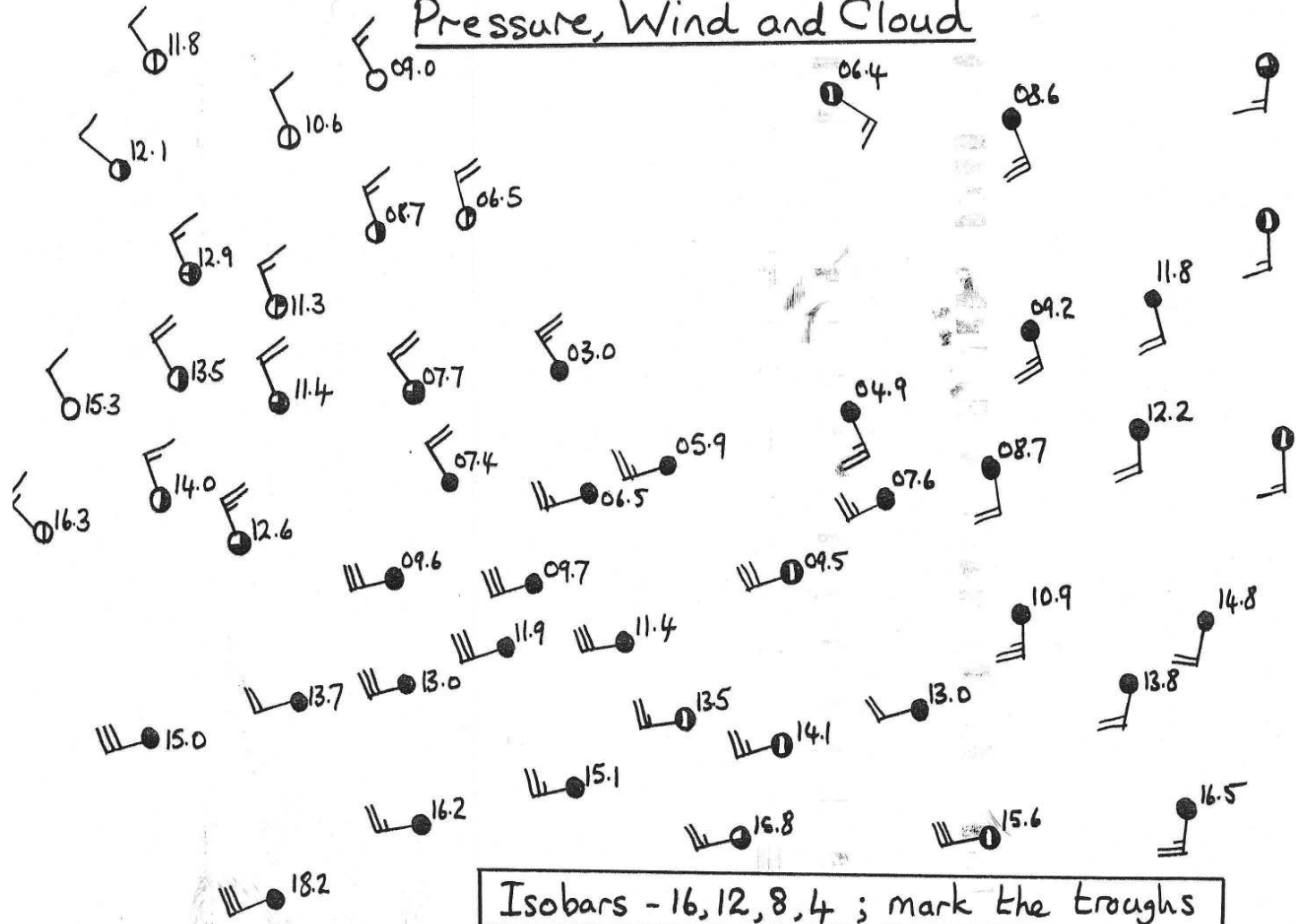
When trying to draw isobars, remember the following

- You are trying to draw the isobars of pressure for the values below the graph
- The symbols on the map give the observed pressure and wind speed and direction. Remember that the wind is blowing from the tail of the arrow to the centre. The bars on the tail of the arrow tell you the wind speed:
- The wind blows almost parallel to the isobars (they usually blow slightly more towards the centre of the low pressure area). If you stand with your back to the wind in the northern hemisphere the pressure is lower on your left than on your right.
- Isobars tend to be parallel to each other, don't wiggle and never cross.
- The closer the isobars are to each other, the stronger the wind. You can use the bars on the tail of the weather station symbol to give you the Beaufort force of the wind. Look at the scale at the top of the map (this is called the 'geostrophic scale'). The distance from the left hand edge of the scale to the force at the symbol gives you the spacing between 2mbar isobars at that point.

Wind	Symbol	Speed(mph)	Force #	Effect
calm		> 1	0	smoke rises vertically
light air		1-3	1	smoke drifts slightly
light breeze		4-7	2	leaves rustle; wind vane moves
gentle breeze		8-12	3	leaves-constant motion light flag extended
moderate breeze		13-18	4	raises dust and papers; small branches stir
fresh breeze		19-24	5	small trees sway
strong breeze		25-31	6	large branches move; use of umbrella difficult
moderate gale		32-38	7	whole trees in motion
fresh gale		39-46	8	twigs broken off trees; difficult to drive a car
strong gale		47-54	9	slight structure damage occurs
whole gale		55-63	10	trees uprooted: severe structural damage
storm		64-73	11	widespread damage
hurricane		above 75	12	devastation

The Beaufort Scale has unofficially been extended to Force 17 to describe tropical storms exceeding 126 miles per hour

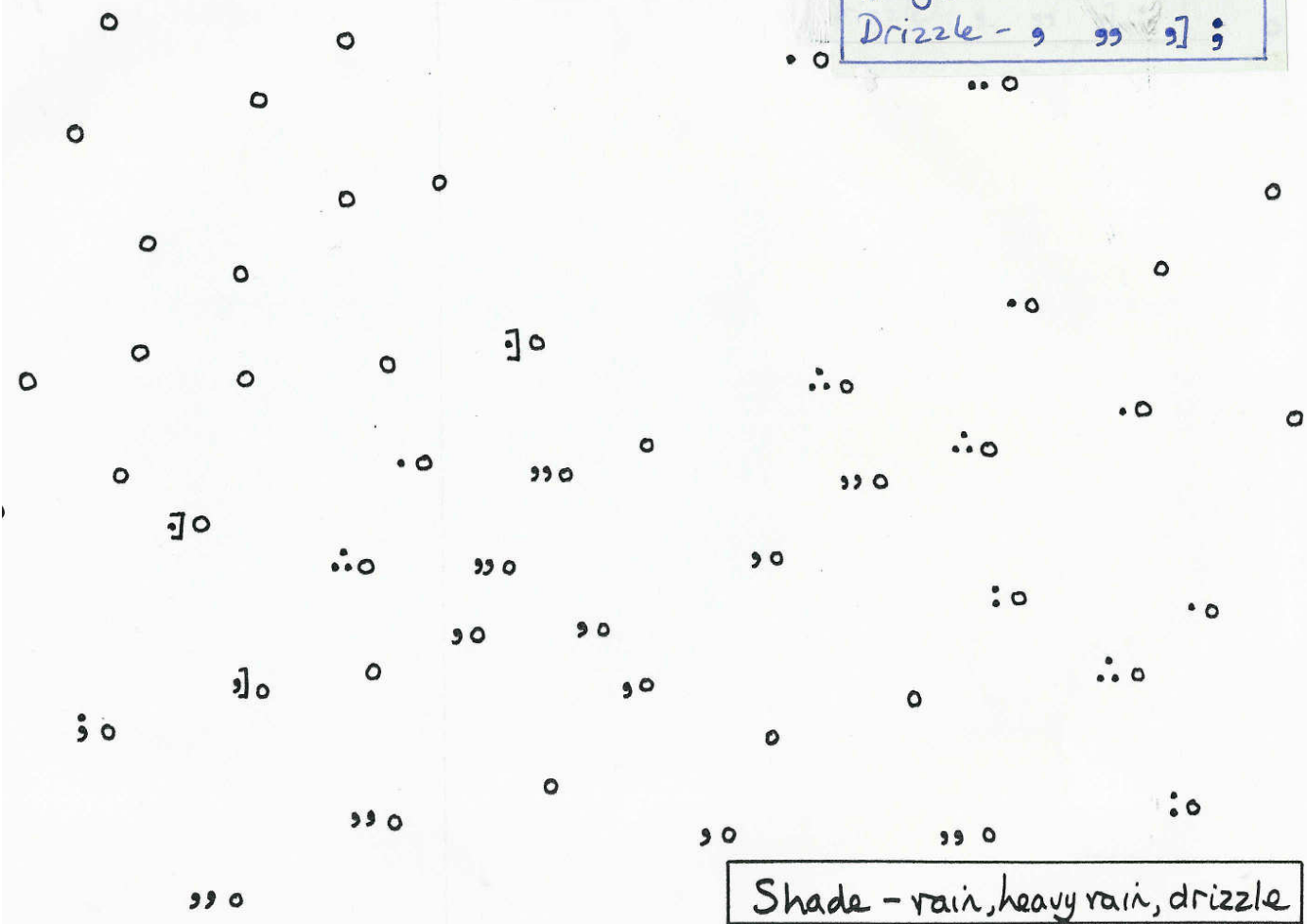
# Pressure, Wind and Cloud



Isobars - 16, 12, 8, 4 ; mark the troughs

# Weather

Rain - • •• ]  
Heavy rain - : :  
Drizzle - , ,, ] ;



Shade - rain, heavy rain, drizzle