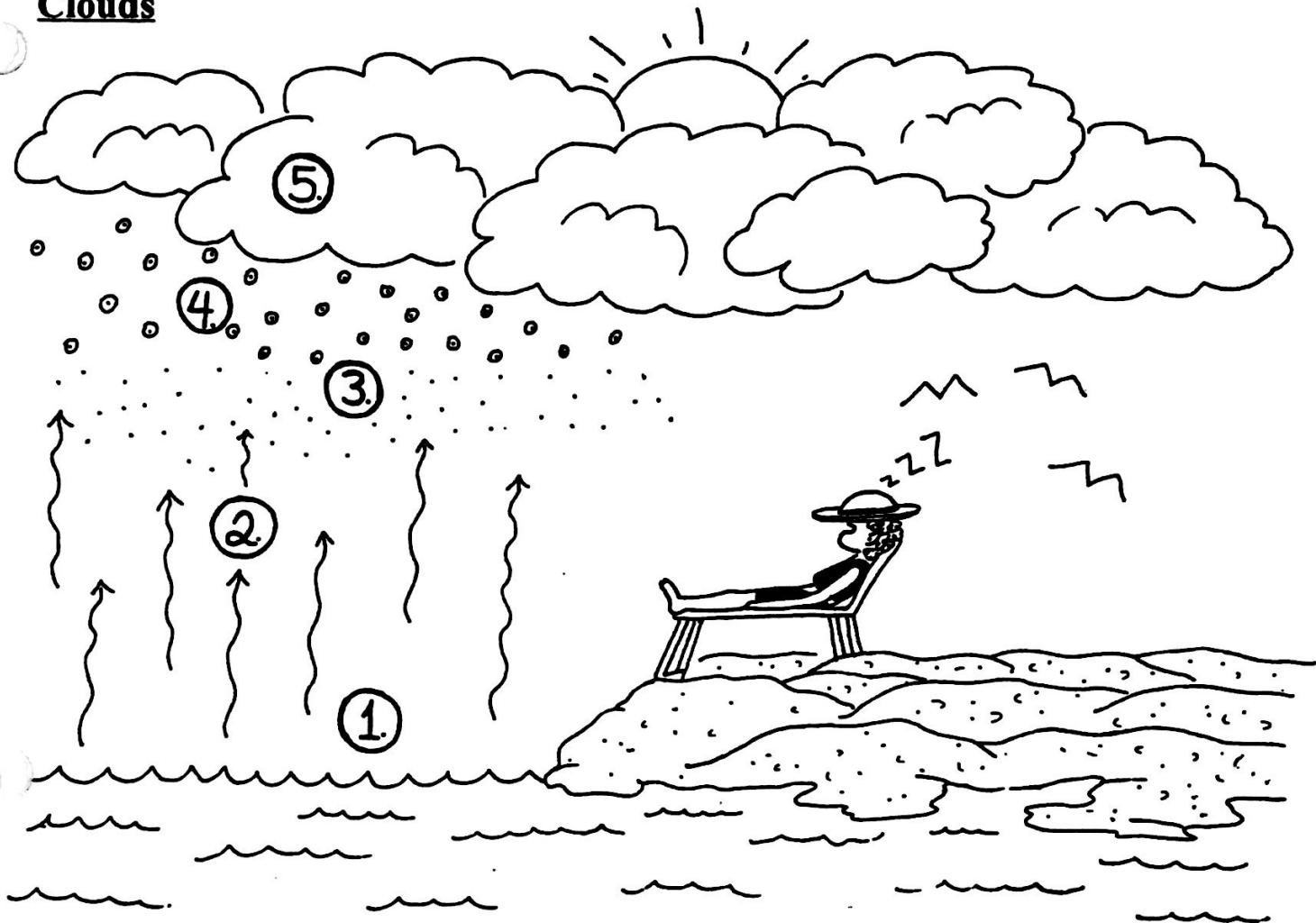


Clouds



- 1) **Liquid water is heated by sunlight and turns to a gas (vapour) in a process called evaporation.**
- 2) **Water in this gas or vapour state is invisible and mixes with other gases in the air.**
- 3) **As the water vapour rises, it starts to cool down again and turns back into liquid water forming very tiny droplets in a process called condensation.**
- 4) **These droplets form around dust particles in the air and are so small that air currents will keep them suspended in the air. (If the droplets get too big, they fall to the earth as rain or precipitation)**
- 5) **Millions of these tiny water droplets are what make up clouds.**

Types of Clouds

1) Fog

Clouds that form near to the ground are known as fog. Fog often forms in the mornings or evenings and around bodies of water. In the daytime, the sun will usually heat the fog, causing the tiny water droplets that it is made of, to evaporate back into invisible water vapour. The fog will then lift.

2) Cumulus Clouds

Puffy white clouds that are a common sight on a sunny afternoon are usually cumulus clouds. Warm air that contains water vapour rises in the daytime. When it cools because it is so high, water droplets condense and these low-level puffy clouds form.

3) Nimbostratus Clouds

Nimbostratus clouds usually mean lousy weather. They form layers of thick grey clouds that block out the sun and often bring steady rain or snow. ("nimbo" means rain and "stratus" means sheet)

4) Cirrus Clouds

These "wispy" high flying clouds (up to 10 km) usually mean dry, clear weather. In winter, these clouds usually mean it will be cold. They are often called mare's tails or painter's brush and are made of frozen water droplets (ice crystals) because of their extreme height.

5) Cumulonimbus Clouds (thunderheads)

These clouds usually form late on hot, sunny afternoons when the air is humid. (Humid means the air has a lot of water vapour in it and feels "sticky") Rapidly rising air creates towering clouds that produce thunderstorms.

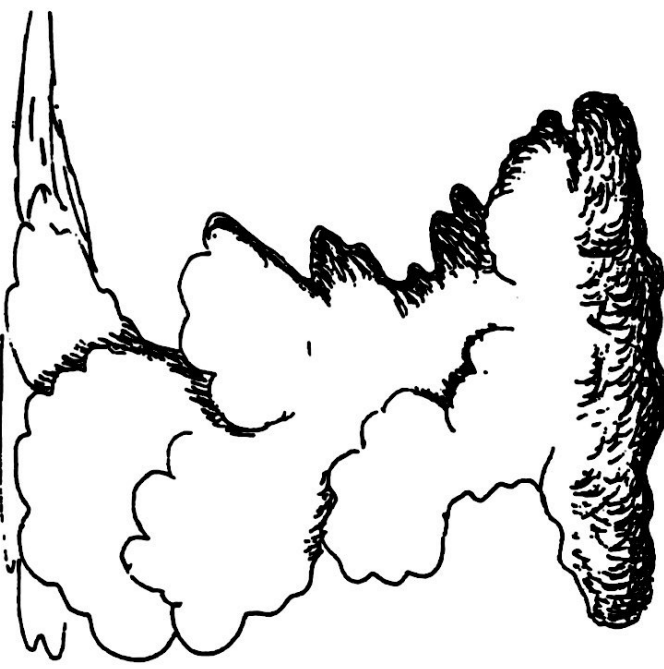


Factfile: High flying jets make clouds of ice crystals very similar to cirrus clouds called contrails.

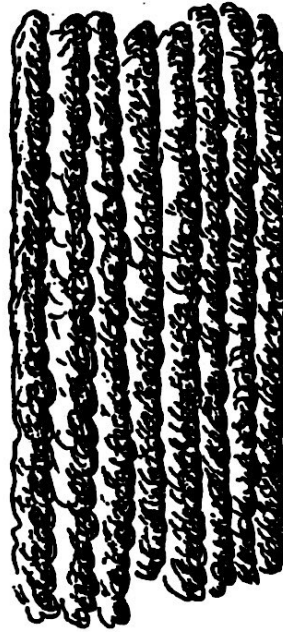
CIRRUS



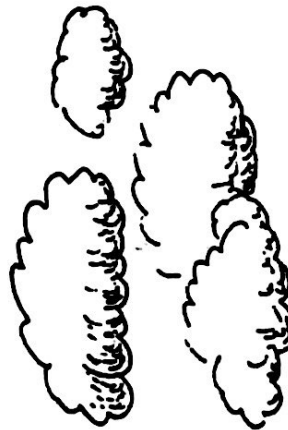
CUMULONIMBUS



NIMBOSTRATUS



CUMULUS



FOG

