

WORKSHEET 24

Activity - Clouds that warm, clouds that cool

Print and copy this worksheet for use in the classroom.

Purpose

To learn what effect clouds have on the temperature at the Earth's surface.

Equipment

- Thermometers
- Cloud Chart <http://www.bom.gov.au/info/clouds/>

Procedure

Use a thermometer in a shady location about a metre above the ground well away from buildings to measure the temperature on clear and cloudy days over several weeks.

Along with the temperature measurement, note the time and date. You should take measurements during both day and night.

Use your cloud chart (photos of different cloud types) to record the type of cloud present.

Estimate the fraction of the sky covered by cloud. An easy way is to observe how many eighths of the sky is cloudy. For example, if half the sky contains clouds, you would describe the cover as $\frac{4}{8}$. If clouds occupy only a fraction of the sky, you would write $\frac{1}{8}$.

Draw up and record your results in a table like the one given below.

Date	Time	Temperature	Cloud Type	Cloud Cover

Questions

Answer the following questions in the space provided.

1. Examine your data to see if you can work out what effect clouds have on surface temperatures.

