

## What are the features of the sun?



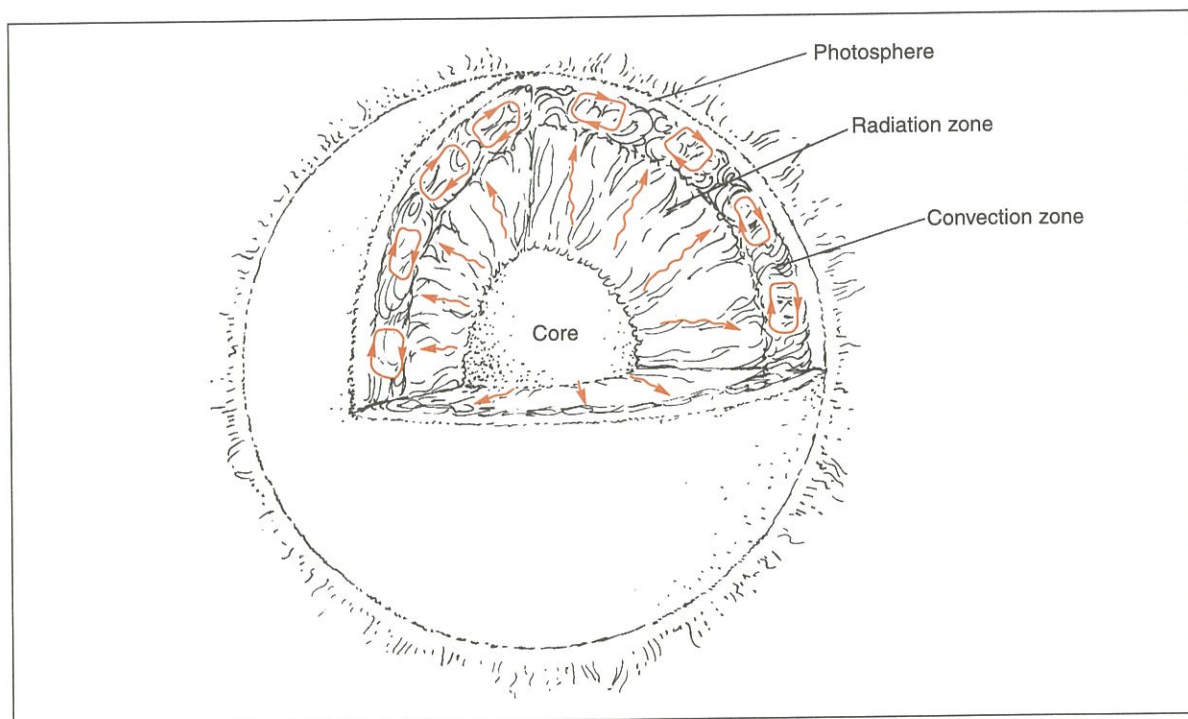
### KEY TERMS

**chromosphere:** layer of the sun's atmosphere above the photosphere

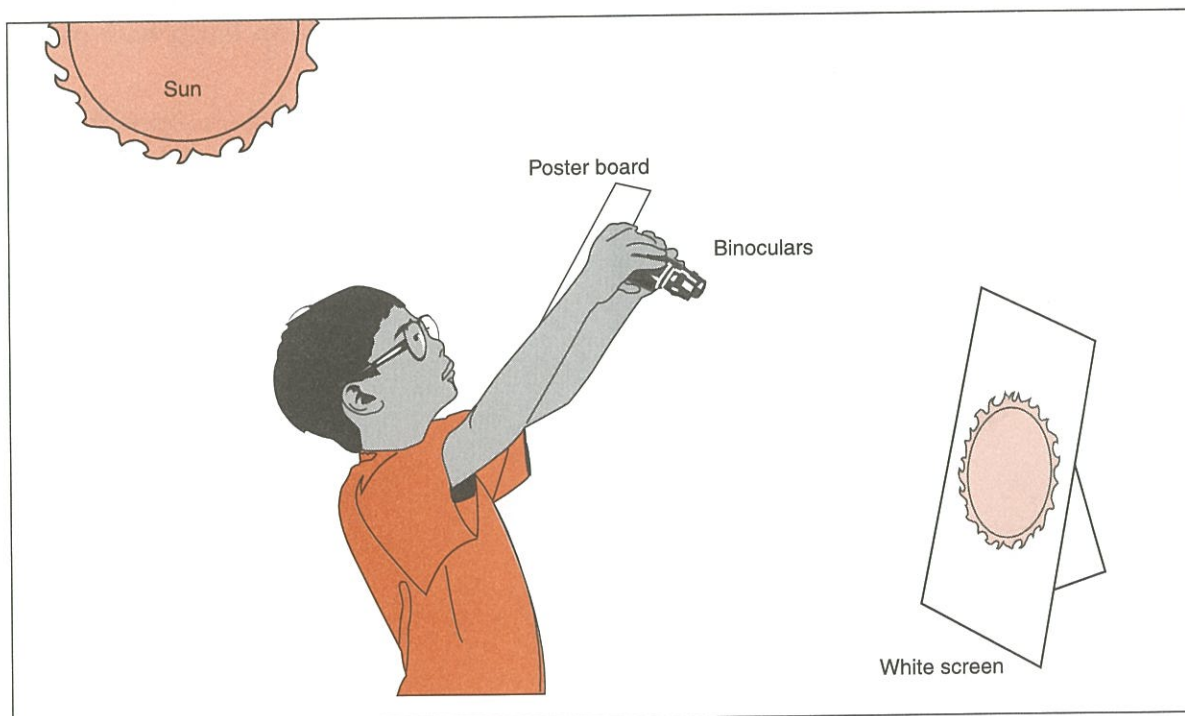
**corona:** outer layer of the sun's atmosphere

**photosphere:** inner layer of the sun's atmosphere

## THE SUN



**Figure A** *The layers of the sun*



**Figure B** *How to study the sun safely*



## THE SUN'S ATMOSPHERE

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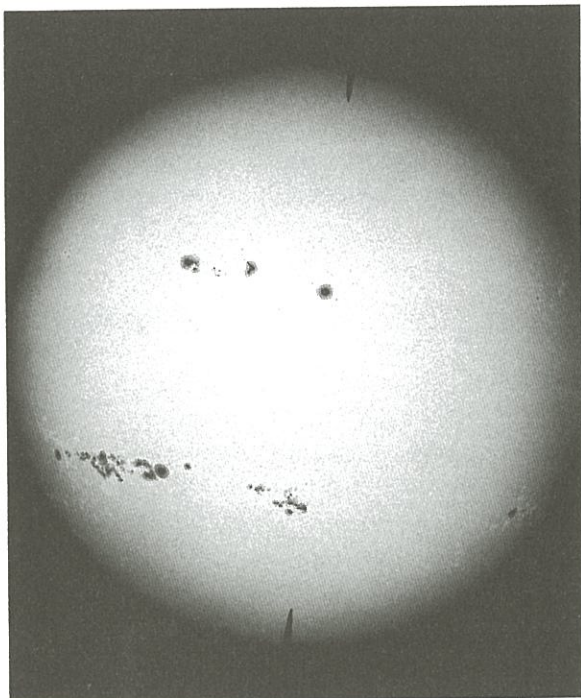


Figure E *Sunspots*

Sunspots are dark patches of gases in the photosphere. They look dark because they are “cooler” than the gases around them. But they are still very hot — about 3,500°C.

Sunspots are magnetic “storms” and have strong magnetic fields. They usually occur in pairs, and may last from a few days to several weeks before disappearing.

The number of sunspots increase and then decrease in a regular pattern. This is called the sunspot cycle. One sunspot cycle takes about 11 years.

Sunspots are very large. They range in size from 1,600 kilometers (1,000 miles) to 160,000 kilometers (100,000) miles.

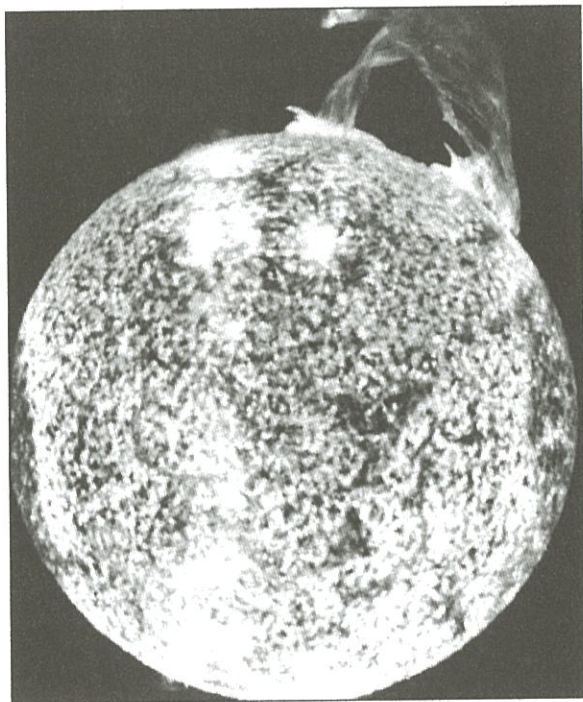


Figure F *Solar Flare*

Sometimes, at the peak of a sunspot cycle, tremendous explosions of solar gases take place near sunspots. The eruption of these gases out of the photosphere are called solar flares.

Solar flares shoot atomic particles and radiation into space. Some reach the Earth's atmosphere. They interfere with radio communications. Solar flares even affect the weather.

Solar flares are huge. They shoot out as far as 402,000 kilometers (250,000 miles) into space.