

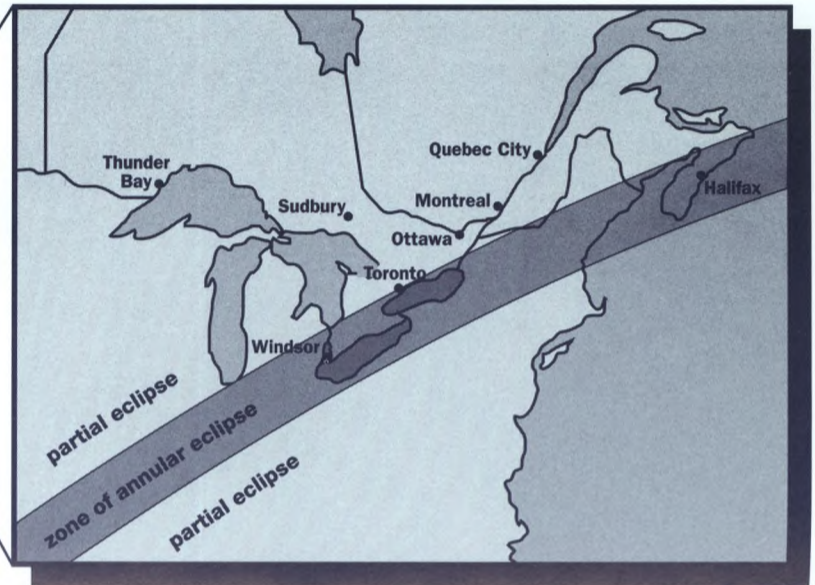
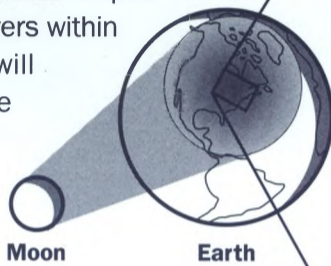
# ECLIPSE

1994



## Tuesday, May 10, 1994...

the Moon's shadow will pass across the surface of the Earth. Most North Americans will see a **partial** eclipse of the Sun - but observers within a 230 km-wide zone will also experience a rare **annular** eclipse.



### The partial eclipse...

will look like the Moon is taking a "bite" out of either the top or bottom edge of the Sun, depending on where you are.



### The annular eclipse...

will look like the Sun has a big, black hole in its centre. The outer rim of the Sun will form a "ring of fire" around the hole.



### How rare is a solar eclipse?

There's a solar eclipse somewhere on Earth at least twice and as many as four times a year. But in any specific spot, it's a lot less common. A partial eclipse occurs somewhere in Canada every few years. But most of Canada won't experience another annular eclipse until June 10, 2021 and will have to wait until April 8, 2024 to see a total eclipse.

### How dark will it get during the eclipse?

Even though the Sun will be 89% covered by the Moon during the annular eclipse, it will still be half as bright as normal outside. You'll notice the change, but unlike a total eclipse, it won't be dark. In partial-eclipse locations far from the annular zone, you'll see no change at all.

## Partial Eclipse Locations • May 10, 1994

City	Partial Eclipse Starts	Partial Eclipse Ends
Thunder Bay	11:36 am	2:46 pm
Sault Ste. Marie	11:39 am	2:56 pm
Barrie	11:42 am	3:07 pm
Sudbury	11:44 am	3:03 pm
Peterborough	11:45 am	3:10 pm
North Bay	11:51 am	3:03 pm
Ottawa	11:51 am	3:14 pm
Montreal	11:55 am	3:17 pm
Quebec City	12:02 pm	3:20 pm

## Annular Eclipse Locations • May 10, 1994

City	Partial Eclipse Starts	Start/Duration of Annular Eclipse	Partial Eclipse Ends
Windsor	11:33 am	1:12 pm (6 min.)	3:05 pm
Sarnia	11:35 am	1:15 pm (3 min.)	3:02 pm
London	11:37 am	1:17 pm (4.5 min.)	3:04 pm
Kitchener	11:39 am	1:20 pm (2.5 min.)	3:05 pm
Hamilton	11:40 am	1:20 pm (5 min.)	3:07 pm
St. Catharines	11:41 am	1:21 pm (5.5 min.)	3:08 pm
Toronto	11:41 am	1:23 pm (3 min.)	3:08 pm
Kingston	11:48 am	1:30 pm (2 min.)	3:12 pm
Halifax (Atlantic Time)	1:16 pm	2:56 pm (6 min.)	4:33 pm



# What you need to know about

## VIEWING THE ECLIPSE SAFELY

### NEVER look at the Sun...

▶ directly



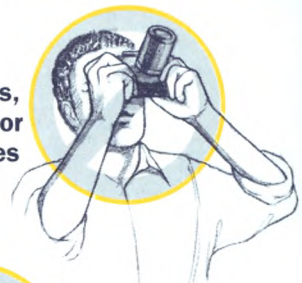
▶ through sunglasses



▶ squinting through a small hole



▶ with binoculars, cameras or telescopes



▶ through film negatives



▶ in a reflective surface like a mirror, water, chrome or shiny plastic



▶ through coloured plastic or glass



### USE WITH CAUTION and only under adult supervision...

#### #14 Welder's Glass or Plastic

Pre-cut 5 cm X 10.5 cm rectangles are available at welding supply shops. Only #14 is safe for viewing the Sun. For added safety, make a cardboard holder for your welder's glass using several layers of duct tape.



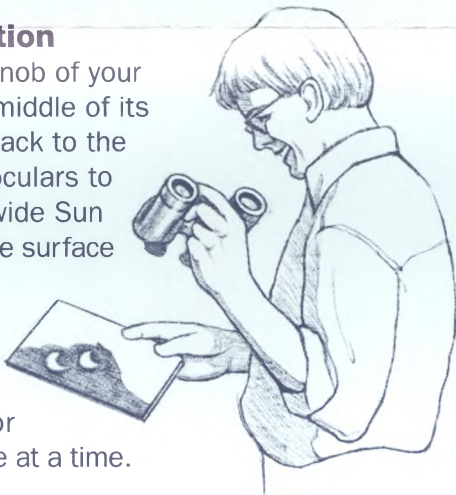
#### Aluminized Mylar Viewers

Make sure you buy these special solar viewing "glasses" from a reputable supplier, such as a telescope dealer. Don't use them if they're scratched or torn - and don't substitute any other kind of Mylar, like window coverings or "space" blankets.



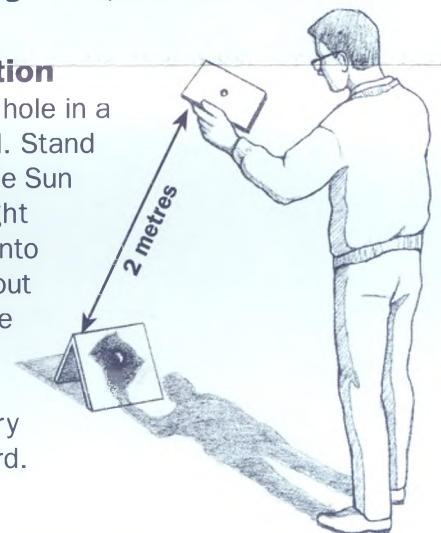
#### Binocular Projection

Set the focusing knob of your binoculars at the middle of its range. With your back to the Sun, hold the binoculars to project two 5 cm-wide Sun images onto a white surface held 30 cm away. To prevent the binoculars overheating, don't use them for more than a minute at a time.



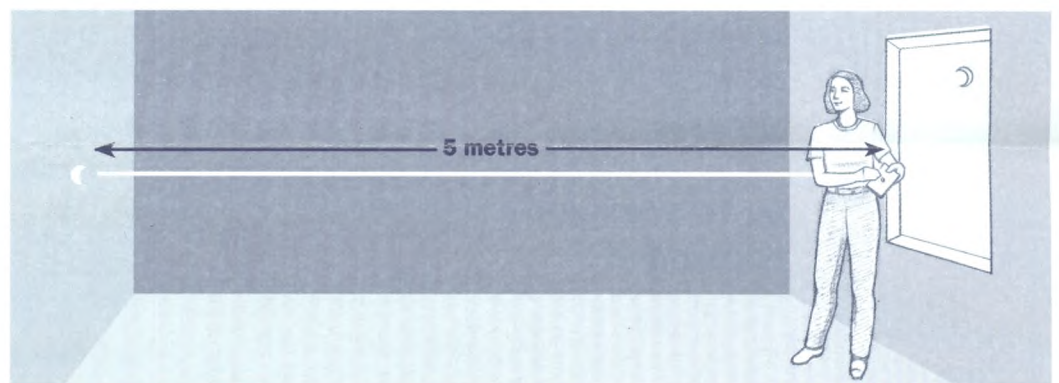
#### Pinhole Projection

Poke a neat 5 mm hole in a piece of cardboard. Stand with your back to the Sun and project its light through the hole onto a white surface about 2 m away. You'll see a 2 cm image of the Sun. To make multiple images, try a piece of pegboard.



#### Indoor Mirror Projection

Tape paper to a mirror, leaving a 1 cm circle uncovered. Tilt the mirror to catch the Sun's reflection and project it onto a wall 5 m away to make a 5 cm image. Don't look directly at the mirror and don't flash it at anyone else.



### WHAT'S FOOLPROOF?

Watch the eclipse on television.

Call your local planetarium, science centre, museum, observatory or astronomy club to find out about special eclipse events near you.

#### Why is it dangerous to look at the Sun?

Visible and infrared light can burn the retina at the back of your eye in seconds. But because the retina has no pain sensors, you may not notice the damage until hours later.