Star Chart

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION

Construct your own Star Finder - Star Chart. Calibrated for New Jersey latitude and useful throughout the year, this star chart will bring many hours of nocturnal enjoyment.

Materials Needed

- 3 sheets of heavy card stock paper
- Computer printer
- Small brass push-pin
- Stapler
- Scissors
- 2 lengths of sewing thread or fishing line (7 and 10 inches long)
- Clear dark skies!

Construction Instructions

- Cut out each image on the lines.
- Push the brass push-pin through the X in the center of the STAR CHART and then through the X in the center of the BACK page. Spin the wheel until it spins freely.
- Cut out the center black area of the FRONT page then carefully fold the labelled lines down.
- Slip the CHART and BACK piece into the folds of the FRONT piece. Carefully staple the three labelled corners.
- Tie one piece of string from the east to west staples and the other from the south staple to the push-pin in the center.

Instructions for Use

The FRONT piece has hours listed along the rounded edge. The CHART features an annual calendar. Turn the CHART so that the time you are out observing and the date line up. Hold the chart over your head with the North arrow facing north. What you see in the star field is what you can see in the sky.

The vertical line from the center to the south staple represents your Meridian, or the line of longitude that runs south from the North Star over your location on the earth. The place where the two strings cross is called your Zenith, or the spot in the sky directly over your head.

To check for accuracy, set the chart for 9:00 pm on August 11th. The bright star Vega, in the constellation Lyra, should be under or extremely close to your Zenith. (Incidentally, August 11th is during the annual Perseid meteor shower, so stay out for a few hours and enjoy the show.)

Light-Shielding Viewer

Using an old cereal box, you can create a Light-Shielding Viewer to block out any ambient light in your area and make viewing easier. The viewer can also fit a pair of binoculars inside!
See last page of this document.

East
North
back
West

STAR FINDER CHART

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION

6 a.m.
5 a.m.
4 a.m
3 a.m
2 a.m.
1 a.m.
0 MIDNIGHT
11 p.m.
10 p.m.
9 p.m.
8 p.m.
7 p.m.
6 p.m

CUT OUT

Cassiopeia

Big Dipper

Orion

South

FOLD

FOLD

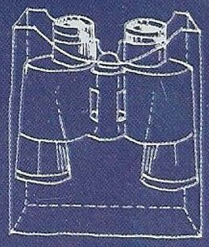
JUNE
JULY
AUGUST
SEPTEMBER
OCTOBER
NOVEMBER
DECEMBER
JANUARY
FEBRUARY
MARCH
APRIL
MAY
COLUMBA
CAELUM
CANIS MAJOR
Sirius
LEPUS
PUPPIS
VELA
PYXIS
MONOCEROS
Procyon
CANIS MINOR
Rigel
Betelgeuse
ORION
ERIDANUS
HYDRA
ANTLIA
Aldebaran
TAURUS
Hyades
Pleiades
GEMINI
Castor
Pollux
CANCER
SEXTANS
AURIGA
Capella
LYNX
Regulus
SICKLE
LEO
LEO MINOR
FORNAX
PERSEUS
ARIES
TRIANGULUM
CETUS
CAMELOPARDALIS
URSA MAJOR
CRATER
PHOENIX
PISCES
ANDROMEDA
CASSIOPEIA
MILKY WAY
BIG DIPPER
CANES VENATICI
COMA BERENICES
CORVUS
CENTAURUS
URSA MINOR
GREAT SQUARE
SCULPTOR
LACERTA
CEPHEUS
DRACO
BOOTES
Arcturus
VIRGO
Spica
AQUARIUS
PEGASUS
Deneb
CYGNUS
Vega
LYRA
CORONA BOREALIS
SERPENS (CAPUT)
Fomalhaut
NORTHERN CROSS
DELPHINUS
HERCULES
LIBRA
PISCIS AUSTRINUS
EQUULEUS
SAGITTA
VULPECULA
GRUS
Altair
AQUILA
SERPENS (CAUDA)
OPHIUCHUS
LUPUS
MICROSCOPIUM
CAPRICORNUS
SCUTUM
Antares
SAGITTARIUS
SCORPIUS
CORONA AUSTRALIS

2.

Line this side up with the top of the other side of a cereal box and cut out the pattern seen here.

Paint the inside of the box black.

Directions for Use



Binocular Use

Light-Shielding Viewer

1.

Line this side up with the top of one side of a cereal box and cut out the semi circle seen here.

Remove the flaps from the ends of the box.