The Sundial Primer

Latitude: 45° N  
5-minute intervals

Date Lines:
1,6,11,16,21,26
Glue latitude scales A/B.

Glue latitude scales to styrofoam before cutting.

Latitude scale A.

Latitude scale B.

Latitude scale C/D.

Bottom paper corner brackets for outer box.
Cut along red lines.
Fold along green lines.
Label parts on the back as they are being cut out.

Fold and glue these narrow sides of the tabs at the centre of the north and south ends of the dial plate. DO NOT glue the part that extends beyond the plate. The tabs are used to help raise one end of the dial plate and hold the other end in the correct position.
Glue box part A and B to styrofoam before cutting. Then glue splice A.

The Sundial Primer
Horizontal & Analemmatic Sundials
Latitude Range: 25° to 65° North

EAST

Glue to bottom of blue tabs. 2 for each gnomon.

Glue box part A and B to styrofoam before cutting. Then glue splice A.

Box A
Glue splice A here.

Gnomon for analemmatic sundial.

Glue to bottom of blue tabs. 2 for each gnomon.
After making the gnomon for the analemmatic sundial to one of the 4 heights, glue the green and pink halves together. Weights can be glued to the blue tabs to stabilize it.

After making the triangular gnomon glue it on the horizontal sundial with the tallest end to the north.
Box C
Glue splice B here.

Cut out four paper strips and glue to exposed styrofoam ends before gluing on vertical corners.

Use this template to make a gnomon out of 1/2" rigid styrofoam board. Make sure that the edges are straight and vertical when they are cut or the gnomon will not sit correctly.

Optional gnomon for horizontal sundial.
Box D
Glue splice B here.

Glue box part C and D to styrofoam before cutting. Then glue splice B.

The Sundial Primer
Horizontal & Analemmatic Sundials
Latitude Range: 25° to 65° North
WEST
Splice B
Cut out two styrofoam parts and glue across the ends of the completed latitude scales. This will help to hold them together.

Glue the 8-1/2" by 11" dial plate to the styrofoam before cutting. Then glue the dial plate to the top of the latitude plates taking care to match the directions, nort to north and south to south.

Use RTV silicon adhesive or similar for gluing to the styrofoam.

For a more rugged sundial laminate all the paper parts.
Glue end of the east side on back.

Glue to styrofoam before cutting.

Brackets for vertical corners of outside box. Fold and glue on the outside.

Horizontal & Analemmatic Sundials
Latitude Range: 25° to 65° North
Horizonal & Analemmatic Sundials

Latitude Range: 25° to 65° North

The Sundial Primer

Glue to styrofoam before cutting.

Brackets for vertical corners of outside box. Fold and glue on the outside.

Glue end of the east side on back.

Glue end of the west side on back.