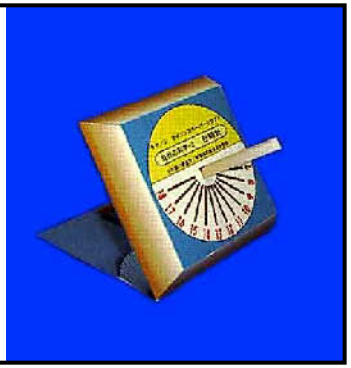
Canon Science Papercraft Mini-book

Natural Science Series **Sundial**

It is thought that sundials were used in ancient Egypt, and even earlier. There are different kinds of sundials; this is a koma type, which has the feature of having markings on both the front and back. The two sides are used for the different path of the sun between the equinoxes.



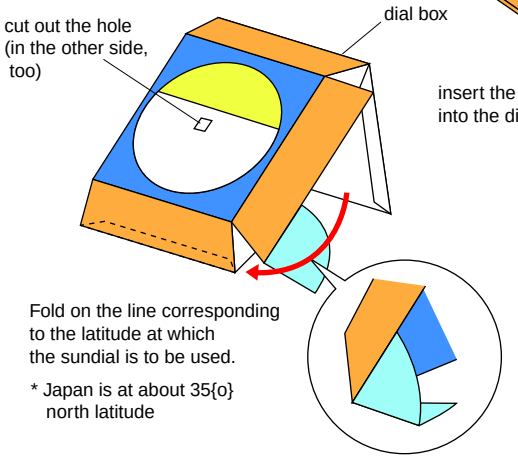
*Cut out the card above and save it. You can collect the cards from each of the Papercraft projects to make your own mini-book!

★Directions

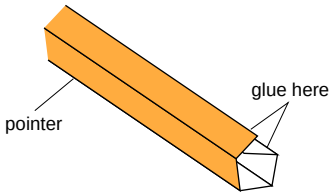
Print out Page 1 and Page 2. Cut out all the parts, and fold along the mountain and valley fold lines.

1. Build the dial box

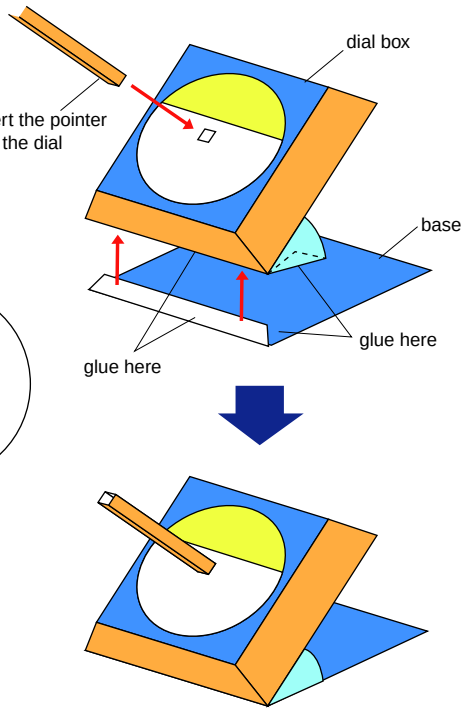
Build the box as shown in the figure.

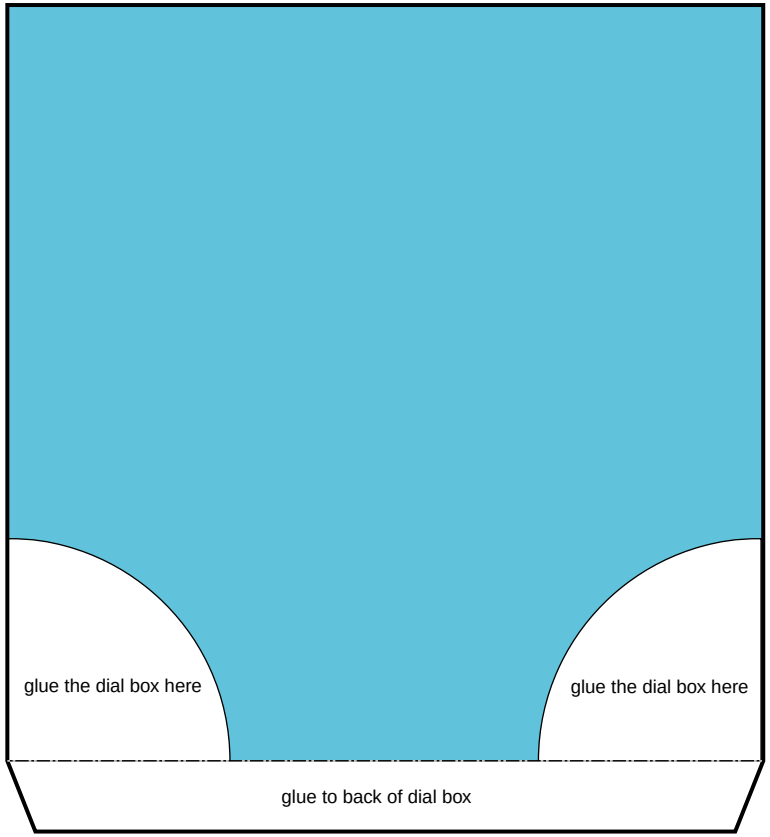


2. Build the pointer



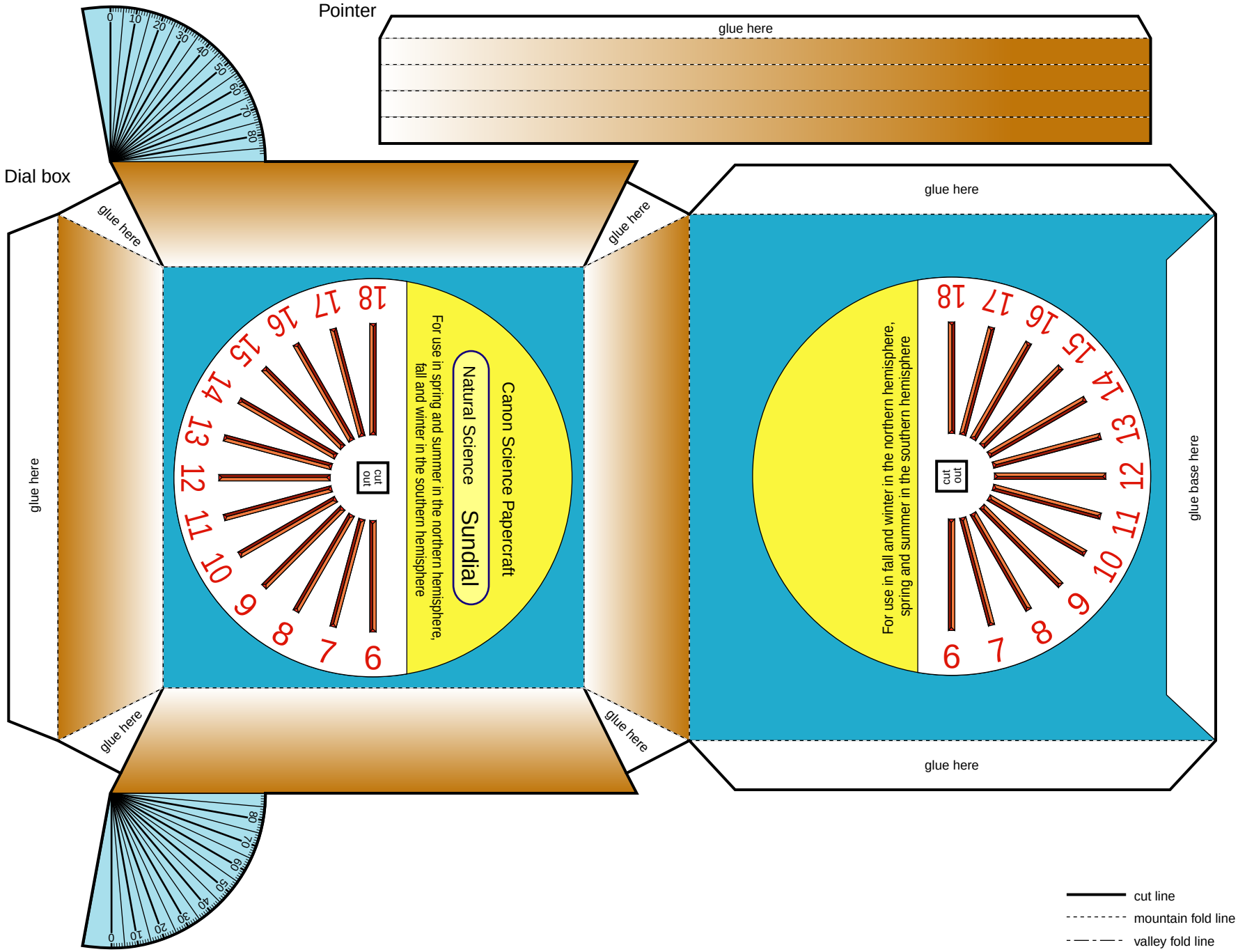
3. Put it all together





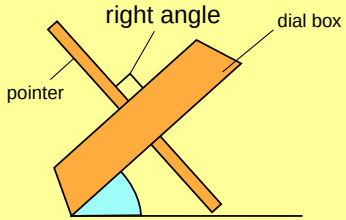
cut line

mountain fold line


Pointer
glue here
Dial box
glue here
glue here
glue here
glue here
glue here
glue here
glue here
glue base here
cut out
cut out
Canon Science Papercraft
Natural Science
Sundial
For use in spring and summer in the northern hemisphere, fall and winter in the southern hemisphere
For use in fall and winter in the northern hemisphere, spring and summer in the southern hemisphere
cut line
mountain fold line
valley fold line

★ Using the sundial

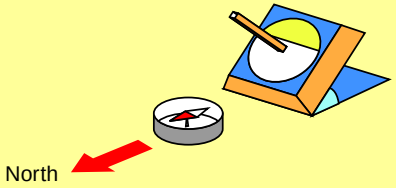
1. Measure and make sure that the pointer is aligned at right angles to the dial.



2. Place the sundial where it will be in direct sunlight all day long.

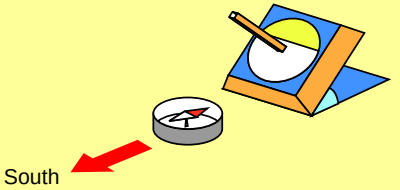
* For use in the northern hemisphere:

Aim the pointer directly at true north (using a compass or other means).



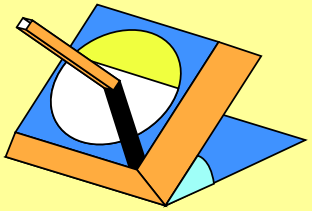
* For use in the southern hemisphere:

Aim the pointer directly at true south (using a compass or other means).



Note that magnetic north deviates somewhat from true north, depending on latitude.

3. The number on which the pointer's shadow falls on the dial indicates the current time.



* In the northern hemisphere, use the front dial in the spring and summer, and the back dial in the fall and winter.
In the southern hemisphere, use the back dial in the spring and summer, and the front dial in the fall and winter.