



STARS & PLANETS guidebook

Do you like looking at the stars at night? Are you interested in learning about the planets in outer space? Then come along! Let's do the experiments in this kit together to learn all about stars and planets!

In this guidebook, you will see a lot of things that you already recognize. The pictures will guide us in doing our experiments and projects. And whenever you see a Try It box, you will see more ideas for other exciting experiments.

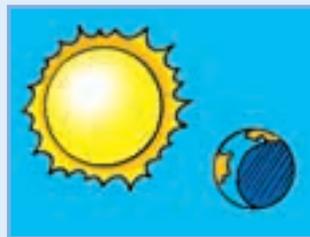
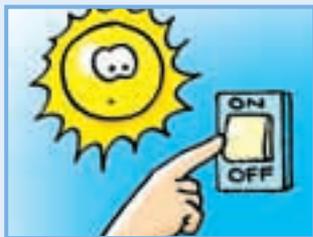
Inside the kit, you will also find a colored Knowledge Wheel. You can quiz yourself with it to see if you remember the things that you discovered while doing your experiments.

And now, let's begin!





Experiment 3: Why is there day and night?



Or do you have other ideas?

Figure it out like this!



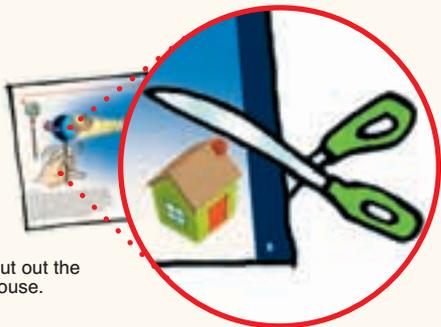
Skewer



Manual page



1



Cut out the house.

2



Glue it onto the foam ball.



try it

You can also paint the foam ball just like a real globe. If you want to do that, just look at a globe or world map to see what the continents look like and where they are located.



3



4

Darken
the room!



Answer:

Earth not only revolves around the sun, it also rotates around itself. As it does that, one side of the globe is always lit by the sun, while the other lies in shadow. In our experiment, the flashlight is the sun emitting its light. If you turn the globe and watch the house you glued onto it, you will see quite clearly when it is nighttime for the house and when it is daytime.

Cut out
and glue to
foam ball





Experiment 5: Why does the moon have a face?



Or do you have other ideas??

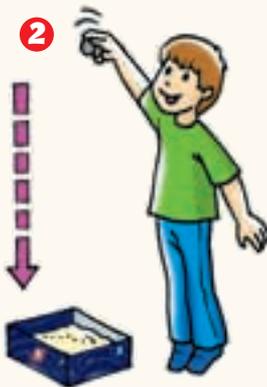
Figure it out like this!



1



2



3



Safety note:

Be careful not to inhale any flour dust!
After the experiment, carefully close up the flour container and wipe out the box with a cloth.



Answer:

When you look at the full moon, it looks like it has a face. But what you're seeing is just the moon's irregular surface, consisting of lots of hills and craters that were probably created by meteor impacts. You can create a similar-looking surface by dropping pebbles onto the smooth flour surface.