

EARTH MOON MODEL MAKING KIT

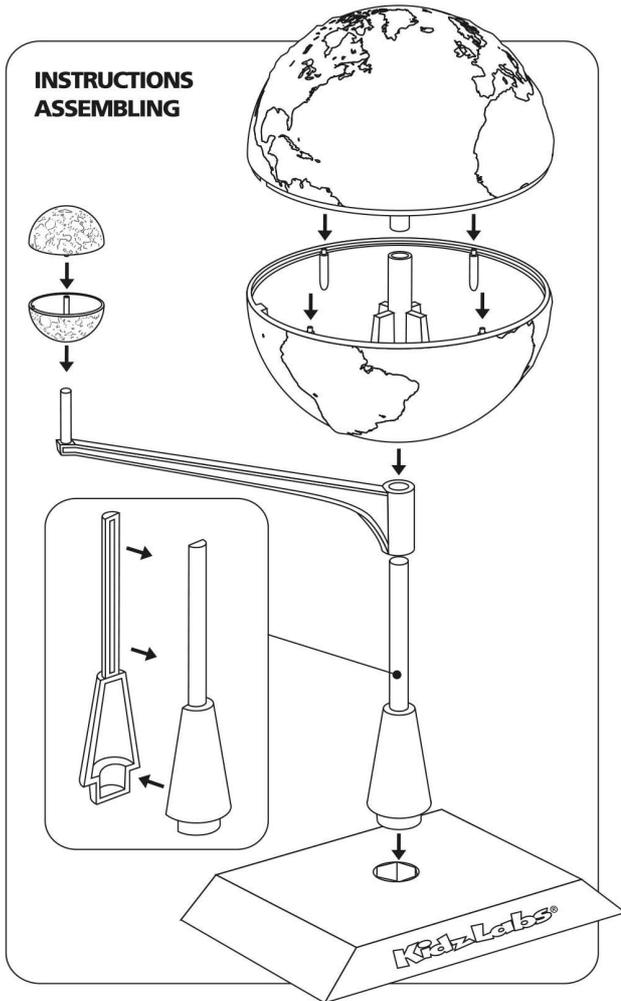
FOR AGES OVER 8

WARNING:

**CHOKING HAZARD - Toy Contains Small parts and Small Ball.
Not for Children under 3 years.**

SAFETY MESSAGES

- 1. Please read through this instructions before you start.**
- 2. Adults assistance and supervision recommended.**
- 3. This kit contains small parts which may cause suffocation if misused. Not intended for children below 36 months.**



OTHER ATTENTIONS

If clothes are stained by paint then wash immediately. Dried paint may leave mild stains on clothing even when they are washed. Put on your apron or wear old working clothes if necessary.

CONTENTS

1 set 3 dimensional Earth model with geographical relief, 1 set 3 dimensional Moon model, 1 set stand and rotating arms, 1 paint strip with normal colour paint and 2 glow paint, 1 brush, 1 sanding paper detailed assembly and painting instructions with fun facts and activities.

INSTRUCTIONSASSEMBLING

©2003 4M INDUSTRIAL DEVELOPMENT LIMITED.

PAINTING

Before you start painting, use the sanding paper provided to sand the surface on which you would like to apply the paint. The paints apply better on coarse surfaces. Use your own colour scheme or refer to the illustration as shown on the package. For best results apply more than one layer of paint but wait until the first layer is dry before applying a second coat. It is always easier to paint a darker colour on a lighter colour background than the reverse. You may also add a small drop of dishwashing detergent to the paint and mix it. This will help the paint apply on the surface better (especially for plastic surfaces). Follow the colour mixing guide below to produce more colours. (Some of the following guides may not apply to your kit if the required colours are not included)

Green = Yellow + Blue, Orange = Yellow + Red, Purple = Blue + Red, Brown = Red + Yellow + little Black, Pink = Red + White, Sky Blue = Blue + White, Lime Green = Yellow + little Blue, Turquoise = Blue + White + little Yellow. Mix the colours with white and black to make them look lighter or darker respectively. Do not mix too many colours together as that will make final colour look muddy.

Always wash your paint brush before mixing or applying a new colour. Prepare small cup of water for this purpose. It is also a good idea to use a mixing tray for mixing paints. Close the pot lids tightly to prevent dry up of the paint. If the paint is dry, dilute it with a few drops of water.

APPLYING THE GLOW PAINT

After the basic background colour is done, highlight your creation with a thin layer of glow paint. The glow paint is semi transparent and thus you will still see the background colour. If you would like to achieve a better glow effect, apply more layers of glow paint. However this will cover more of the background colour and make it look a bit milky.

HOW TO MAKE IT GLOW

Charge it with any light source for a few minutes, turn the light off and watch it glow magically in the dark. Recharge them and it will glow again and again. The fun is unlimited.

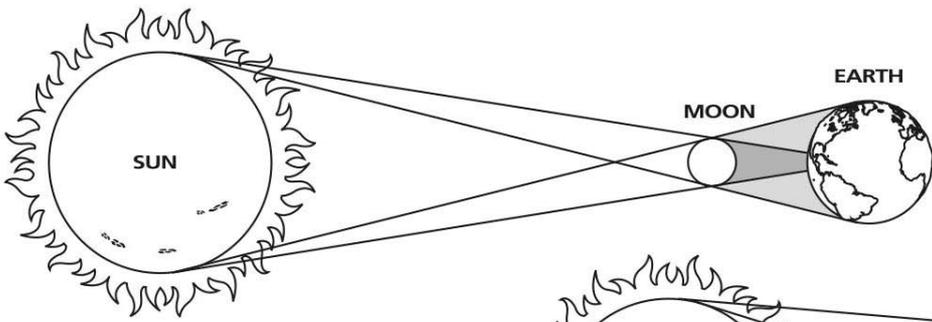
KIDZQUIZ™

QUESTIONS:

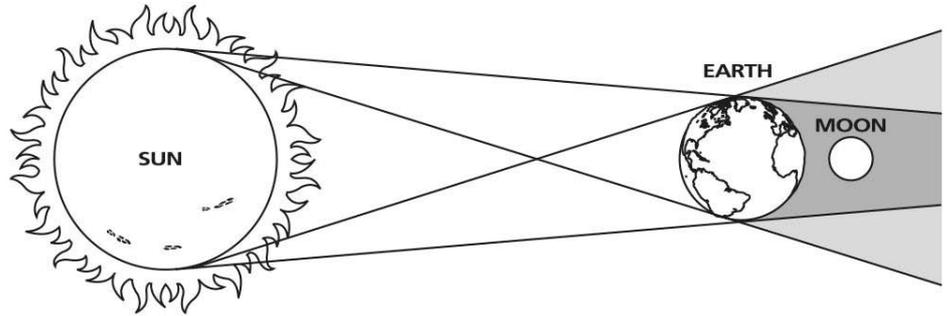
1. Who was the first human who stepped on the Moon surface?
2. Do we always see the same side of the Moon from Earth?
3. How much bigger is the Earth when it is compared to the Moon?
4. If a man is 50 kg on Earth, what is his weight on the Moon?
5. Name the ocean movement which is affected by the Moon?
6. How frequent is the Lunar Eclipse?
7. When does Lunar Eclipse occur?
8. Could we hear any sound on the Moon?
9. What was the origin of the Moon?
10. When does a Solar Eclipse occur?

ANSWERS:

1. Neil Armstrong, on NASA's Apollo 11 mission, July 20, 1969.
2. Yes. Due to the fact that its self spinning time is the same as it's time orbiting the Earth (i.e. 27 days 8 hours). Since the Moon's rotation is synchronous with the Earth, the Moon has always the same side facing us. We started to have the view of its far side in 1959 when the unmanned Soviet Luna 3 mission orbited the Moon and took photos from different sides.
3. The Earth is about 4 times the size of the Moon. The Moon's diameter is 3476 km, whereas the Earth's is about 12756 km.
4. About 8.5 Kg, his gravitational force on the Moon is only 17% of the Earth's.
5. The tidal movement. It is affected by the gravitational pull of the Moon.
6. On average twice a year.
7. It occurs when the Sun, the Earth and the Moon align in a straight line. The Earth is in the middle and the eclipse is actually its shadow casts on the Moon.
8. No. Since there is no air on the Moon. Sound needs air to travel.
9. It has been suggested that the Moon was originally part of the Earth. The Moon was formed about 60 million years after Earth was formed (about 4.3 billion years ago). A Mars-size object collided with the Earth and the ejected material coalesced into the Moon which later orbited Earth.
10. A Solar Eclipse occurs when the Sun, Moon and the Earth align in a straight line and the Moon in between blocks our views of the Sun.



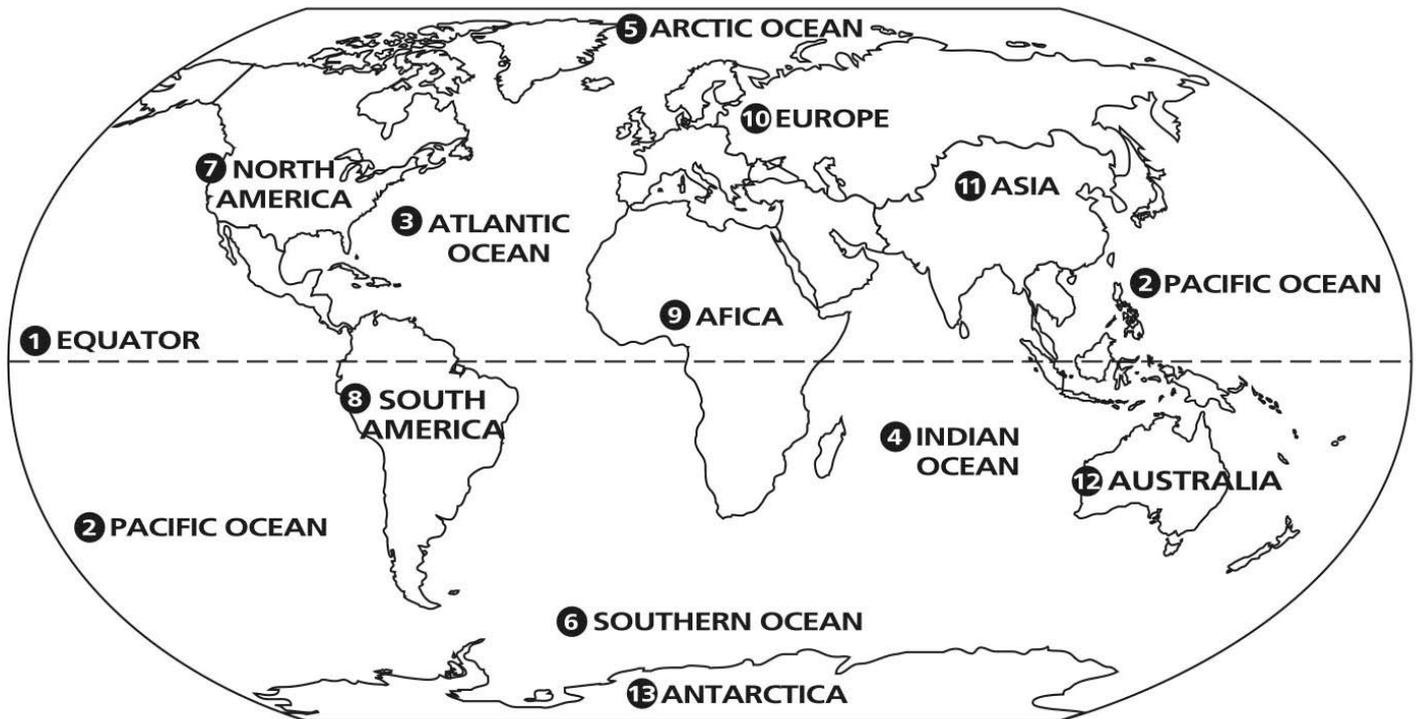
2 LUNAR ECLIPSES



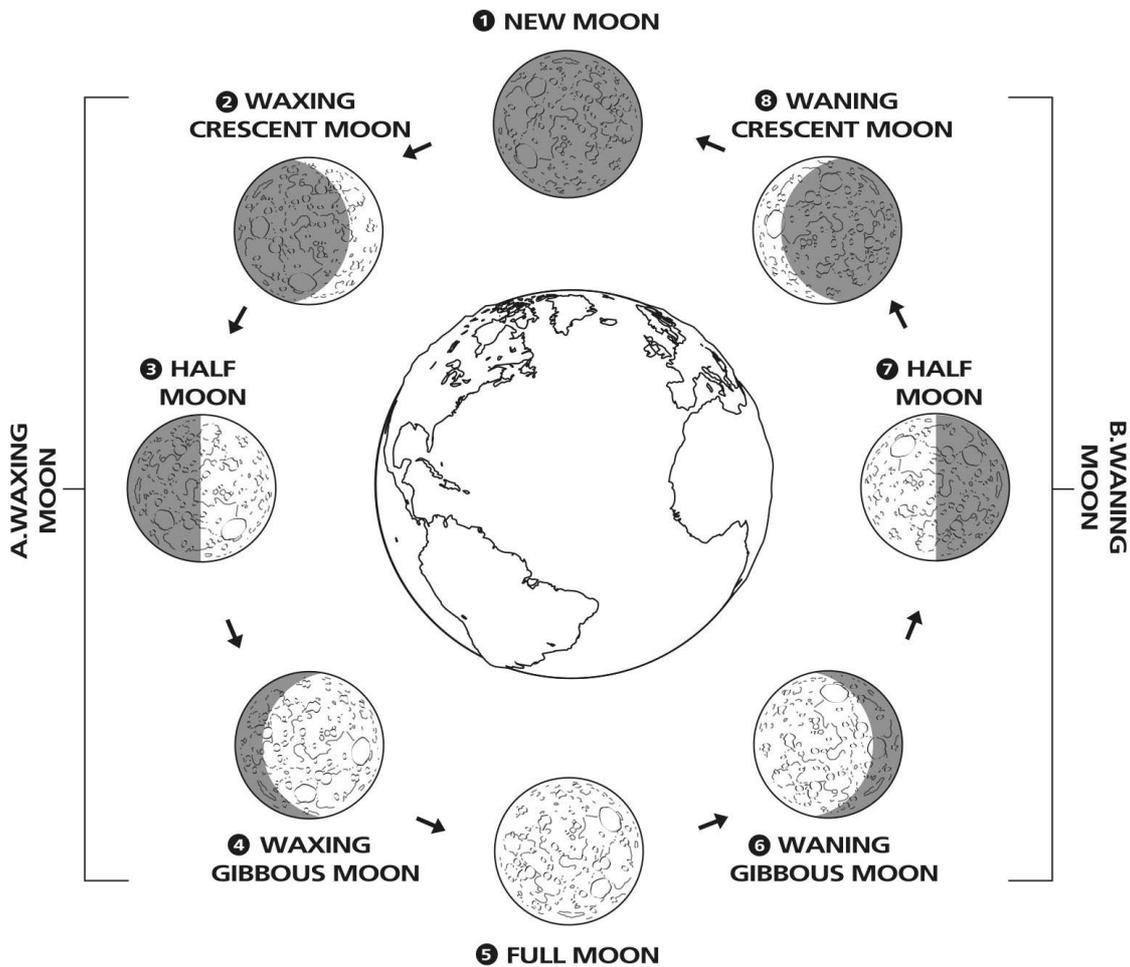
FUN ACTIVITIES

Here are some other activities which you could make use of the Earth Moon model you made.

1. Show and tell how Solar Eclipse and Lunar Eclipse happen. Follow the diagrams below, and use a light up torch for the positions of the Sun. The show will be more impressive in darkness.



2. Refer to the diagram below, name the Earth's continents and oceans and point to the place where you live.



3. Use a light up torch as the Sun and shine it on the Moon from different angles and observe how different phases (shape) of the Moon are formed.

RECYCLE TIPS

Help save our environment, do not throw away those spare and unused materials. Keep them for use with future craft or activity projects. The unused paints and the brush could be used in most craft projects in school or at home.

QUESTIONS & COMMENTS

We treasure you as a customer and your satisfaction with this product is important to us. In case you have any comments or questions, or you find any parts of this kit missing or defective, please do not hesitate to contact our distributor in your country, whose address is printed on the package. You are also welcome to contact our marketing support team at Email: infodesk@4m-ind.com, Fax (852) 25911566 ,Tel (852) 28936241, Website: www.4m-ind.com.