

Crystal Mining

A. SAFETY MESSAGES

1. Please read through this instructions before you start.
2. Adults assistance and supervision required.
3. This kit and its finished product contain small parts which may cause suffocation if misused. Keep away from children under 3 years old.
4. Do not place the material in mouth. Do not inhale dust or powder.
5. Do not place the materials in the mouth. Do not inhale dust or powder. You may wear protective eye goggle and a face mask for further protection when digging.

B. OTHER ATTENTIONS

1. Always work on a solid, level working surface and try to keep the area neat and clean.
2. Do not pour the powder down to the sink or bath tub as it may clog the drain.
3. Plaster may stain some clothing. Wear a working cloth or an apron before you start. Wash the plaster on clothes with soap. Do not mix with other laundries.

C. CONTENTS

- 1 plaster block with natural 8 crystals buried inside,
- Specially designed digging tool,
- 1 brush,
- 1 magnifier,
- 1 set display case with cover and base card,
- 1 pouch bag,
- 1 detailed instruction with fun facts.

D. ACTIVITY 1: MINE YOUR OWN CRYSTALS



D1. Dig on the plaster with the hammer side of the tool. When plaster is loosen, scrape them away with the flat side of the tool. When a crystal start to show through the plaster, apply the digging and the scraping gently or there may be chance the crystal will be broken. Use the brush to brush away the loosen plaster powder.



D2. Remove the crystal from plaster when it is completely detached. Dust way the plaster powder with the brush. A crystal is mined. Repeat the above steps until all crystals are mined.


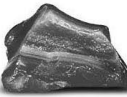



Remarks: The kit is intended for kids imitating a geologist digging up crystals. The digging process has to be done in patience like the real geologist. The activity may take a few hours or days to complete, which depends on the kid's ability. That is essence of digging fun.

E. ACTIVITY 2: MAKE YOUR OWN CRYSTAL COLLECTION

E1. CLEANING THE CRYSTALS

Prepare a pot of warm soapy water and an used toothbrush or other soft brushes. Carefully scrub dusted crystals with the toothbrush and soapy water.

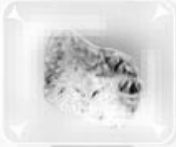

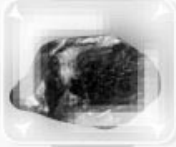
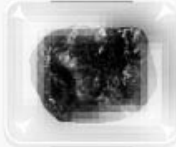




Afterwards wash them with water and put the cleaned crystals on a piece of newspaper for drying.

CRYSTAL	TYPE	CHARACTERISTICS
	Clear Quartz/ Rock Crystal	Some transparent, some milky or striated. Long, pointed.
	Agate	A wide range of colors and it is often variegated and banded. It also is quartz, belonging to the Chalcedony family. Its name comes from "achates" (Greek) and is said to be the first found near the river Achates in Scilly.
	Dolomite	Colours will range from various shades of green, to yellow, red, black, and white. It is an opaque or translucent gemstone. There are three different minerals that are called jade - jadeite, chloromenlanite and nephrite. And the green color is determined by the amount of iron present.
	Amethyst	Transparent, pointed crystal and the colour is purple, violet and pale red-violet. Amethyst is the most highly valued stone in the quartz group. The name means "not drunk", as amethyst was worn as an amulet against drunkenness.
	Rose Quartz	Strong pink or pale pink. Usually translucent but may be transparent and often crackled. A little turbid. Colouring agent is titanium.

E2. STUDYING YOUR CRYSTALS

You can use a magnifying glass to study your crystal. Here is the information of the crystals included in this kit.

MY CRYSTAL COLLECTION

Name <u>Clear Quartz</u> Date <u>23/8/05</u> Place <u>In the garden</u>	Name <u>Agate</u> Date <u>30/6/05</u> Place <u>On the beach</u>	Name <u>Amethyst</u> Date <u>1/7/05</u> Place <u>In the backyard</u>
		
Name <u>Amethyst</u> Date <u>15/7/05</u> Place <u>On the beach</u>	Name <u>Dolomite</u> Date <u>23/6/05</u> Place <u>In James garden</u>	Name <u>Rose Quartz</u> Date <u>23/6/05</u> Place <u>In the garden</u>
		
Name <u>Dolomite</u> Date <u>23/9/05</u> Place <u>In the backyard</u>	Name <u>Clear Quartz</u> Date <u>23/8/05</u> Place <u>In the garden</u>	Name _____ Date _____ Place _____
		

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E3. MAKING & DISPLAYING " MY CRYSTAL COLLECTION"

Take out the display base card and cover case.

Put information of the crystals in the corresponding information square.

After all crystals information are filled in, slide in the cover card with the crystals to the base card.

Gently turn over the card. Fix the case with the adhesive tapes at the back.

F. ACTIVITY 3: MAKE A SPECIAL CRYSTAL GIFT

Why not send the precious stone as gift to your friends or family. Since ancient time, it has been widely believed that crystals process mystic power which could bring in good luck and health. A bag is provided in this kit. Simply choose one of the crystals from your collection. Put it in the bag and sent it as a gift. The recipient will love this special gift.

If you have rock tumbler at home, you may tumble the crystal and have them polished. They will become more shinny and transparent after tumbling, and present a very precious gift.

G. FUN FACTS

Deep inside our Earth the temperature is very high at which all rocks and minerals are in melted form called magma. When this magma rises toward the Earth through volcanic actions, they starts to cool and form solid rock and crystals.

A rock is made up of more than 2 minerals whereas a crystal is composed of 1 mineral throughout.

Most of the crystals provided in this kit belong to quartz group. Quartz is silicon dioxide, SiO₂. Quartz is abundant in the Earth's crust and is the chemically simplest silicates. People use The Mohs Scale to measure the hardness of each mineral. The softest is talc (1) and the hardest is diamond (10). (Remarks: thought picture shown below are of similar nature to the ones included in this kit, they are of a better quality and the shapes have been polished. Quartz has a hardness of 7.

When you pick up a rock from the backyard. You may be able to find some tiny crystal embedded. If the cooling process is slow, the minerals will form into large crystals which might as large as a few feet. Most of our Earth's crystals take thousands of year to grow. However, some crystallisation process could be so quick that you could watch its formation at home e.g. salt crystal. Different most common understanding, crystals have not to be clear and transparent. It all depends on the nature of its forming minerals. But obviously, beautiful, clear and transparent crystals (gems) are more preferred for making jewelry.

QUESTIONS AND 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, Web site: WWW.4M-IND.COM