

# MINERAL DISCOVERY



## WARNING.

- »» Not suitable for children under 6 years.
- »» For use under adult supervision.
- »» Read the instructions before use, follow them and keep them for reference.



## >>> KIT CONTENTS

>>> Materials that are not included in the kit are marked with a + symbol in the "You will need" sections.

>>> If you are missing any parts, please contact Thames & Kosmos customer service.



## Checklist: Find – Inspect – Check off

✓	No.	Description	Count	Art. no.
<input type="radio"/>	1	Amethyst	1	715508
<input type="radio"/>	2	Rose Quartz	1	715509
<input type="radio"/>	3	Flint	1	715510
<input type="radio"/>	4	Quartz	1	715511
<input type="radio"/>	5	Amazonite	1	715504
<input type="radio"/>	6	Apatite	1	715505
<input type="radio"/>	7	Mookaite (Windalia radiolarite)	1	715506
<input type="radio"/>	8	Labradorite	1	715507
<input type="radio"/>	9	Pyrite	1	715512
<input type="radio"/>	10	Desert Rose	1	715513
<input type="radio"/>	11	Plastic form (for crystals and treasure boxes on poster)	1	715288
<input type="radio"/>	12	Measuring cup (30 mL), blue	1	065100
<input type="radio"/>	13	Measuring cup (30 mL), clear	1	061150
<input type="radio"/>	14	Die-cut sheet	1	715283
<input type="radio"/>	15	Wooden spatula	1	000239
<input type="radio"/>	16	Bag of plaster (200 g)	1	771052

>>> First check the list to make sure all the right materials are included in the kit.

### You will also need:

old cup or plate, slim flashlight, hobby glue, watercolor paints, sandpaper, magnifying glass, pen



## MINERAL TEST 4

# Translucency

## YOU WILL NEED



+ Slim flashlight, pen

## INTERESTING!

Another thing you can do with minerals is see if you can shine **light** through them. This method is not used very often, since **foreign particles** in the stone can block the light and thus reduce the validity of the test. Still, it is often helpful for ruling out certain minerals. Some of your minerals will not let any light through, while quartz minerals are always translucent.



Try it with a small flashlight. Hold the flashlight up to one of your minerals and carefully view the stone from the opposite side. Note: Do not look directly into the light. Which stones let light through? Record your findings in the table.

## Aha!

Flint lets very little light through, even though it belongs to the quartz group. This has to do with the high quantity of foreign particles in it.

Minerals + Light Visibility ↓	Amethyst	Auriferous	Apatite	Quartz	Flint	Labradorite	Malachite	Pyrite	Rose Quartz	Desert Rose
Clear/ Transparent										
Milky/ Translucent										
Not visible/ Opaque										



## Amethyst

This beautiful purple stone is also a member of the large quartz group. It contains traces of iron, and these **iron atoms** became altered by exposure to natural radiation in such a way that they produce a purple color (otherwise, iron will create a green or brown color).



In Brazil, it is not uncommon to find meter-long **rock cavities lined with amethyst crystals**. There is also a famous 400 meter-long amethyst gorge in the Austrian town of Maissau — which inspired the locals to choose purple as their “town color.”

## Making your minerals poster

### YOU WILL NEED



Put the minerals in their plastic treasure boxes, place the boxes in their proper locations on the poster, and hang the poster on the wall.

### TIP!

The treasure boxes come in different sizes!

