# Rocks in your eyes <br> by Jane Robb 



## Contents

(with hyperlink from each item on the list to the relevant section).

Chapter One - Touching the past
Chapter Two - Purple Points
Chapter Three - Rocking On
Chapter Four - The Decision
Chapter Five — Scottish Riches
Chapter Six — Definite Definitions
Chapter Seven — Dynamic Win
References

## Chapter One-Touching the past

Pebbles, whether rough, smooth, shiny or dull. l've always been fascinated by them. I've remember my first special stone. I named it after reading a story by the author Shirley Hughes. She wrote books about a small boy called Alfie and one of the stories was 'Bonting'. It is about how a boy finds a stone he likes. He asks his mum to make clothes for it and keeps it by his bed in a small box. He calls it Bonting.

My stone is called Bonting. Shortly afterwards I found another stone and called it Ben. Although this was when I was
 three years old, Bonting and Ben still have a special place in my collection.

Beaches, whether grubby or grand, slimy or shiny you can always find stones. Whatever beach I may have been to, I've always taken home rocks - big. small, long, tall. The collection grew and grew and GREW!

## Chapter Two-Purple Points

Shining, glittering, purple points or amethysts are the crystals which catch my eye.

While travelling from Toronto to Winnipeg, mum and Dad pass an amethyst mine near Thunder Bay in Canada. I think I remember the sparkle and excitement of looking for the amethysts in the Quarry. My mum likes to tell everyone what I said when I was there, "Mum, dad, we're rich!" Well, I was only four.

Canada
Key

1. Toronto
2. Winnipeg
3. Thunder Bay


Amethysts belong to the quartz group of minerals. The purple colour is from titanium and iron. I read in a book that the best amethysts come from geodes in volcanic rock form India, Uruguay and Brazil. A geode is a cavity (which is a hole) in a rock filled with crystals. I am lucky enough to have a large amethyst geode from Uruguay.

## Chapter Three—Rocking On


#### Abstract

It appeared that I had shelves of rows of rocks by the time I was eight years old. While on holiday at Culzean Castle, to my great joy I found a museum of rocks and minerals. What I first saw met my eyes in a flash. I gazed and I gazed and I gazed. I fell in love with Gem Rock Museum. From every crystal you can think of (even if you can't think of them) they are all there.


There were glass cases standing all around filled with amber, haematite, amethyst, agates, quartz, diamonds and gold and more unusual topaz, tourmaline, dioptase and aragonite.

A cave dark and narrow with crystals gleaming as I walked through. You will find geodes taller than me and crystals shining in fluorescent light.

Excited, happy, a long list of feelings came into my mind as I entered the shop. My pocket money was spent.

Coming back home from the same holiday to my astonishment I went to another mineral museum. Gold panning, a museum, beautiful countryside.

Gold panning, for the first time in my life, oh yes! I was better than my mum. Six grains of gold, well l'm not a millionnaire yet! On my second attempt I did get sixteen grains.

Wanlockhead was a lead mining area and many minerals are found there. Apart from some haematite, baryte and galena (which is lead ore), I found quartz and quartz and quartz and quartz and of course quartz.

The miracle about quartz isIt is all different.

| Rock crystal | $-\quad$ Clear, shiny points |
| :--- | :--- | :--- |
| Milky quartz | $-\quad$ Solid, white and glistening |



| Rose quartz | - | Pink and sugary |
| :--- | :--- | :--- |
| Citrine | - | Browny orange little points of crystal |

Smoky quartz - Grey and dusty
Amethyst - Purple points
Quartz veins - Rocks with layers of quartz

The different varieties of quartz still amaze me.

The countryside is warm and welcoming. Putting my hand in the burn I pick up some rocks, out they come all wet and shiny. I feel happiness and restlessness when l'm walking through the heather. I want to make my home there - out in the open. I'm not scared (well, if my mum stayed with me!)

A visit to Edinburgh, a visit to a museum, a visit to the Royal Museum of Scotland!

Rows of glass cases filled with rocks, minerals and fossils. All so shiny and beautiful. I wish I looked after them, I wish I could touch them.


Gold, giant crystals and fluorescence, gemstones and jewellery, round and round I walk gazing at everything.

Downstairs to the world of dinosaurs, skeletons and Ichthyosaurus and Antrodemus, Evolution of mammals and man. Then into the new building and 'Beginnings' takes you through the forming of Scotland.

And then I had a thought that struck me, a decision was made.

## Chapter Four - The Decision

I asked my mum. She said yes. "Where shall we put it - in the games room? It will take a bit of tidying out". We planned, we cleaned, we moved new things in and we moved old things out a museum.

It is a lot of hard work being a curator of a museum. I had to organise my specimens, label them and catalogue them. I had to design a leaflet, tickets and membership cards. I had to write a tour guide and learn it to show people round. I had to display a children's information area. I had to make a shop with leaflets.


Then there was only one more thing to do - find more places to collect.

## Chapter Five - Scottish Riches

Scotland is full of riches and I want to go to visit everywhere for rock, mineral and fossil collecting. l've only been to a few places and I will tell you stories from three of my visits.

Barns Ness full of fossils and fascination. At Barns Ness the landscape shows from when Scotland was at the equator through the Ice Age through to present day. The fossils show crinoids, productoids and corals. The basic rock is limestone, which is a sedimentary rock made from the mineral calcite. Calcite is mostly made of broken up packed down sea shells and skeletons of corals.


Scotland

Key

1. Barns Ness
2. Preston
3. Old man of Storr

Bearreraig Bay

Get up early in the morning, make the sandwiches, pack the rucksack and off we go with the Edinburgh Geological Society on a walk and bus ride following the Whiteadder Water. At a roadside quarry on the Gifford to Duns road, we stopped to hunt for graptolites. They are found in beds of shale. Graptolites were animals which lived in a colony. Each graptolite lived in a cup-like house on a strip of many. I think of it like a block of flats with little houses sticking out the sides. At Elba, north of Preston there are three old copper mines. I love the idea of finding mines and want to go in them, but I can be scared.

Once my mum convinces me it is all right, I usually go in and I'm glad that I do. With a hard hat and a torch, we go into the last copper mine and I find my first piece of malachite. Malchite is a green mineral found in copper.

Such a small island with such a vast number of rocks, geologists find the Isle of Skye a good place to study. It hides many secrets of the past in its rocks. It has some of the oldest rock from about 3,000 million years ago. This is called Lewisian Gneiss and is found in the southern part of Skye.

Although we toured a lot of Skye, I'm going to tell you about the Old Man of Storr and Bearreraig Bay.

Big, tall blocks of rock, standing on it's own. The Old Man of Storr was formed by a landslide. The basalt rock crushed the sedimentary rock underneath making the land move and forming an unusual landscape.


I collected basalt with stilbite and mesolite in it. These minerals are types of zeolites. Mesolite is white, thin and moss-like. It is a beautiful and unusual crystal. Stilbite has a long thin streaks with a glowing shine.

We climbed down long narrow steps. We puffed and panted. At last we came to the rocks of Bearreraig Bay. We got told there were ammonites and belemnites staring us in the eye but there were not. I only found part of an ammonite and one belemnite. They are not very good specimens but I was glad I had found something after that climb!


## Chapter Six - Definitions

Stones, rocks, minerals, gems but what are they? Well, the definition of a mineral from a dictionary is, "A mineral is an inorganically formed, naturally occurring, solid substance". This means in a simpler way, that a mineral is solid, not living and found on the earth. But there are some minerals which don't follow this rule. Mercury is not solid and limestone (calcite mineral) is made of dead animals and shells so they are really organic.

A rock is a mixture of minerals. The word mixture is important because in science it means that the minerals are just joined together with no chemical reaction. Granite is a rock and it is made from mica, feldspar and quartz.

You can see these minerals when you look at a piece of granite. Quartz is a mineral made of silicon and oxygen but a chemical reaction has happened between them and they have combined to make a new substance.

A gemstone is a mineral. Some are rare which means they are not found easily. This makes them valuable. When they are cut and polished they make jewellery and ornaments.

Crystals are in minerals and have a regular pattern or shape that the same type of crystal will always grow in.

Stone is a word not used in geology. Builders use the word stone to describe the material they build with. I have used the word stone for pebbles found at beaches.

Pebbles are rounded, smooth rocks usually rounded by the sea.

Fossils occur when an animal dies and sinks into the seabed. Then the body of the animal gets buried in mud and sand and all the flesh and soft parts rot away, leaving only the skeleton. As the mud and sand turns to rock the skeleton becomes fossilised in the rock. The rock then may be eroded away so the fossil can be seen. This, of course, takes millions of years. Lots of animals are not ever fossilised because the dead animal may get eaten and the skeleton broken up before it had time to get buried.


## Chapter Seven - Dynamic Win

"Ready to rock?" the leaflet said. I thought yes. I asked my mum. "Of course." she said. I joined Rockwatch. It really is the best club on Earth! You get magazines, fact cards-you go to Rockwatch event and you can enter a competition. I did.

I entered the Rockhound Challenge, rockhound section. I wrote a report which told something about me and how I was interested in geology and described my collection-which is my museum —with notes, examples of labels, leaflets, catalogues, field notes and photographs. I presented it in a display folder, sent it in the post and waited.

A letter for me. I picked it up. I opened it. There I saw a letter from Rockwatch. It said, "Congratulations! You are the winner in the category of Rockhound 1999, under 12's. "Wow! A rockwatch member was certainly rocking with joy!

The presentation was arranged for my prize-giving with an officer from the Rockwatch. he told me where it was. I was so pleased.

Behind the scenes, a special tour with the director of . . .
"Our Dynamic Earth."

A dynamic win at Dynamic Earth making a dynamic day.

The earth trembles under your feet. You move with a glacier. You go under and then experience a tropical rainforest. More awaits me in a room with a table full of prizes. Specimens, books, a hammer, lens and more. Everthing I need to collect with.

I can't describe my feeling of joy. So . . .

## . . . Do you have

Rocks in

## your

eyes?


References:

## "The Big Alfie Out of Doors Storybook." <br> By Shirley Hughes.

Gem Rock Museum
back

Chain Road, Creetown, Galloway.

Wanlockhead Museum
Goldscaur Row, Wanlockhead, Dumfriesshire.

Royal Museum of Scotland
Chambers Street, Edinburgh

Rockwatch at the GA
Burlington House, Piccadilly
back
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