




**Explore the similarities and differences between different rocks, making comparisons and describing them.**

**Use senses to explore and recognise different materials.**

<p><b>Gallery visited</b> (please see accompanying map)</p>	 <b>Earth's Treasury</b>
<p><b>Suitable for</b></p>	<p>● Key Stage 1 (ages five to seven)</p>
<p><b>Curriculum links</b></p>	<p>QCA Science Unit 1C: Sorting and Using Materials QCA Science Unit 2D: Grouping and Changing Materials NC Science: Materials and their Properties</p>
<p><b>Example page</b></p>	<p><a href="http://www.nhm.ac.uk/materials-ks1">www.nhm.ac.uk/materials-ks1</a></p>
<p><b>Pre-visit preparation</b></p>	<ul style="list-style-type: none"> <li>• vocabulary: rock, mineral, gems</li> </ul>





# Explore and Discover...

## Materials

### Unearth the treasure game

#### Activities within the guide

The children will be asked to complete four challenges:

Challenge	Description
 1. Rock hard challenge	Look at a large rock display and use senses to describe it
 2. Magic minerals challenge	Look at the colours of minerals and sort them
 3. Star challenge – special treasure	Choose a favourite from the gallery
 4. I spy metal challenge	Spot the objects and identify which are made from metal

These can be done in any order within the gallery. Depending on how many challenges the children complete, they can reach these levels:

- researcher (two challenges completed)
- scientist (three challenges completed)
- professor (four challenges completed)

#### Certificates

On return to school, certificates (available at the end of this document) can be printed out and awarded, depending on the number of challenges completed.

#### Techniques

There are a range of techniques used within the guide. To complete the challenges, children will be required to:

- make choices based on observation
- write short answers
- make personal choices
- choose appropriate descriptive vocabulary
- make sketches
- discuss answers with a partner
- extract information from exhibits and their information boards

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### Materials

# Unearth the treasure game

#### Follow-up activities

- **Award ceremony**

Print out certificates and have an award ceremony.

- **Literacy: Speaking & Listening**

Discuss the experiences had at the Museum and the challenges that were undertaken.

- **Science**

Make collections of rocks into boxes. Create sorting trays, each with a different title, for example rough, smooth and so on. Children must then sort the collection into the trays.

- **Science/Literacy**

Make your own Earth's treasury display with items brought in from home. Sort them into exhibits and write the labels to go with them.

#### Suggested answers for challenges



##### Rock hard challenge

The objective is for children to observe the rock carefully and closely, using sight and touch and to describe what they see and feel. However, different children are likely to perceive or describe the rock differently, so a variety of answers would be acceptable.

**Question 2:** Answers are likely to vary, depending on which colours children identify, but they may include black, brown, white and orange.

**Question 3:** The rock generally feels rough and bumpy. Some parts feel sharp and others feel smoother, so either term is acceptable.

**Question 4:** Answers will vary, but could include words such as holes, bumpy, rough, spotty, sharp, smooth or hard.



##### Magic minerals challenge

**Question 3:** Children may ring around all the colours listed (green, purple, pink, red and yellow). They may also add silver, white, brown, black and orange (and possibly others).

**Question 4:** Children can choose which groups to sort their minerals into, for example colour, size or shape.

**Question 5:** When the light goes out an ultraviolet light comes on and some of the minerals glow (fluoresce).



##### Star challenge

Answers will vary depending on the object chosen.

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### I spy metal challenge

**Question 2:** The Mineral wealth case contains glasses, coins and paper. The Metals in the modern age case contains a frying pan and a colander so might be ticked as well.

**Question 3:** All the objects in these cases have come from the earth, either from minerals or metal ores.

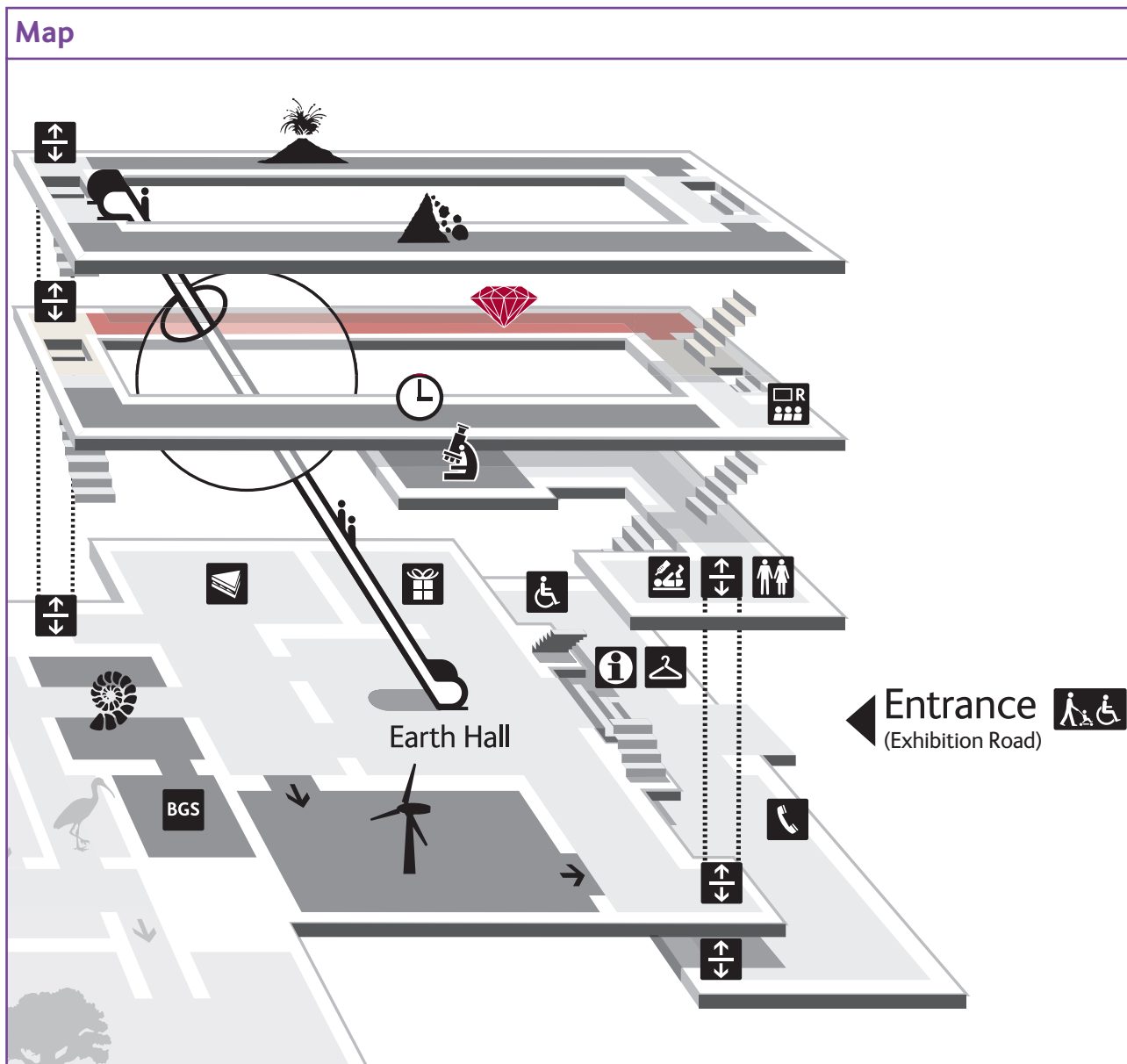
**Question 4:** Answers will vary.

**Question 5:** The idea here is that children think about how an object is fit for purpose. For example, a saucepan could not be made out of wood because it will burn.

Explore and Discover...

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## Unearth the treasure game



A larger, full-colour version of this map showing the whole Museum is available at reception when you arrive.

# Certificate

This is to certify that

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became a

# researcher

in the [Explore and Discover... Materials challenge](#)

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Teacher's name

Date



# Certificate

This is to certify that

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became a

# scientist

in the [Explore and Discover... Materials](#) challenge

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Teacher's name

Date



# Certificate

This is to certify that

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