

## **Meteorites Front-End Evaluation Summary**

- This document summarises the main findings from the meteorites front-end evaluation.
- The aims of the evaluation were to:
  1. Find out visitors' current level of knowledge and understanding of meteorites and planetary science.
  2. Find out what visitors' expectations of a meteorites exhibition at the Natural History Museum would be.
  3. Find out what would bring visitors to an exhibition on meteorites and planetary science.
- Visitors to the Natural History Museum were interviewed over a range of days. They completed card-sorting activities and answered open-ended questions. Twenty groups, comprising 44 individuals were interviewed. They were aged between 7 and over 60. Most had no special interest or training in science.

### **Visitors' knowledge and understanding**

- Visitors were asked to consider the words meteorites and planetary science and write down what they thought of.
- The word meteorites made many visitors think about what meteorites were made of, the impact craters they make and the word rocks.
- Some visitors were also prompted to write down other words associated with space such as space or asteroid.
- Visitors often had spontaneous questions about meteorites and planetary science.
- The words planetary science made many visitors think of words associated with space such as solar system and also words associated with studying planets and the characteristics of planets themselves.
- Visitors were asked to sort terms into categories according to how familiar they were with them.
- Most visitors were very familiar with the terms solar system, astronomy, comet, shooting star and astrology.
- Most visitors had more difficulty with the terms asteroid, supernova, meteor shower and star dust.
- Visitors were unfamiliar with meteoritics, presolar grain and chondrite.
- Although visitors were reasonably familiar with the terms and seemed to know basic information, their understanding of meteoritic and planetary science terms

seemed rather vague.

- When asked, visitors had varied questions that they wanted to know about meteorites.
- They tended to ask very specific questions rather than more general planetary science questions.
- These questions included knowing where meteorites come from, what they are made of, how we know about them and if they are dangerous.

### **Visitors' expectations and needs**

- Visitors' expectations of a meteorites exhibition were also varied.
- About 60% of the comments referred to the look and feel of the exhibition.
- Visitors expected specimens that you could touch and a "hands on" experience.
- In terms of content, visitors often expected to find out what meteorites are, details about impact craters and where meteorites come from.
- By contrast, when visitors were asked what would make them visit an exhibition about meteorites nearly all concentrated on the exhibition itself rather than on content messages.
- Visitors wanted to be able to touch real specimens. Some also wanted a talk or tour and audiovisual equipment.
- Visitors were asked to rate their interest in potential exhibition topics through a card sorting exercise.
- Most visitors were very interested in meteorite impacts on earth, the possibility of life on other planets and Lunar and Martian space missions.
- Most visitors were somewhat interested in how planets are formed, meteorites from Mars, the origin of the solar system and moon rocks.
- Visitors were less interested in how scientists study meteorites and the history of meteorite studies.
- Overall visitors had basic knowledge about meteorites but did not seem confident in their understanding.
- Visitors seemed to be interested in most of the topics surrounding meteorites and mentioned a variety of topics in the interview. They seemed generally interested in visiting a meteorites exhibition.