

National Geographic Kids Reader: Meteors

Notes for teachers: using this book in the classroom

Reading objectives: read most words quickly and accurately, without overt sounding and blending, when they have been frequently encountered; read aloud books closely matched to their improving phonic knowledge, sounding out unfamiliar words accurately, automatically and without undue hesitation; retrieve and record information from non-fiction

Spoken language objectives: participate in discussions, presentations, performances, role play/improvisations and debates; use relevant strategies to build their vocabulary; give well-structured descriptions, explanations and narratives for different purposes, including for expressing feelings

Curriculum links: Science: Earth and space; Art and Design

Interest words: atmosphere, friction, solar system, orbit, asteroid, gravity, comet, meteor shower, Kuiper belt, Oort cloud, meteor, meteoroid, meteorite, frigid, nucleus, geology

Pronunciation guide: kuiper (*ky-per*), Oort (*ort*)

Resources: paper; pencils; crayons

Children who are reading at White and Lime book bands will be able to read this book in a group, pair or independently over several sessions. They will have good reading stamina and will be able to tackle more challenging vocabulary and a range of varied sentence structures. Guided group work and independent challenges can be used to develop retrieval, interpretation and meaning making, as well as children's ability to express and explain ideas and concepts.

Language

- Most of the language in the book will be decoded by children using the full range of cues available to them and extensive word knowledge. Some discussion in guided groups and after independent reading can be used to develop children's abilities to understand and interpret more complex information. Children may need help with the following:
 - decoding and understanding some of the words contained in the *Meteor Meaning* boxes: *atmosphere, meteoroid, meteor, friction, solar system, orbit, asteroid, gravity, comet, meteor shower*. Children may need to look at the glossary to use the visual support provided.
 - reading new names, e.g. *Kuiper Belt, Oort Cloud*.
 - remembering the differences between the key words: *meteor, meteoroid, meteorite* (page 11).
 - reading and understanding some less familiar vocabulary, e.g. *frigid, nucleus, geology*.

Collins

- Children may need to look closely at the pictures and diagrams and talk about some of the labels and less familiar scientific vocabulary to develop their understanding of new ideas.
- Children may need help to understand some of the more complex ideas, e.g. the differences and similarities between types of meteorite.
- Children may need help to process how matter changes from one form to another, and to understand the cause and effect explanations.

Images

- Enjoy poring over the photographs, diagrams and explanations within this book. Ask children to explain back what is happening in each diagram, and what they can see in photographs.
- Challenge children to look closely at the images of meteorites on pages 12–13 and to find adjectives to describe each type.

Activities

- In pairs ask children to complete the quiz on pages 44–45, using the index and table of contents to locate the answers to the questions.
- Provide children with pencils, crayons and paper. Help them to make a drawing or diagram to show the difference between a meteorite, a meteor, a meteorite and a comet.
- Walk through the book to find and tell the jokes to each other.

Questions

- What is a meteor?
- What different types of meteor are there?
- What is a comet?
- How are moon craters made?
- When is the best time to see a meteor shower?