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NEW!



**NATIONAL
GEOGRAPHIC**

THEME SETS

National Geographic Personalised Learning

A new differentiated programme that provides information on the same theme at 4 different reading stages to develop Reading, Writing and Comprehension Skills



8 sets of 4 informative text books for mixed ability groups

Each set contains 4 different topics each written at a different level yet cover the same key concepts, vocabulary and topic



Developing Literacy Skills

The **Theme Sets** programme supports developing readers and writers by providing appropriate scaffolding and challenges that match the needs of a wide range of students.

Comprehension

Each theme targets one specific comprehension strategy so that students learn and apply that strategy as they read. These strategies include determining importance making connections, visualising, asking questions, making inferences and synthesizing. Teaching notes provide step-by-step help for explicit instruction, modelling, guided practice and independent practice.

Vocabulary

Within each theme, essential content words are targeted as Key Vocabulary and explicitly taught to all students before reading. As students read, they encounter these words repeatedly within rich contexts and have opportunities to use the words in oral and written activities. In addition to the Key Vocabulary covered in all four books, specific book-level words are taught and used in small-group and independent activities.

Visual Literacy

Understanding how to read diagrams, maps, graphs, charts and other visual aids is critical to comprehending non-fiction. Each theme provides explicit instruction and practice in one kind of visual aid so that students learn how to extract and interpret information that is presented visually.

Text Structure and Genres

For each theme, the characteristics of one non-fiction genre/text structure are explicitly taught in the Genre Study. The second article in each Student Book serves as a model of that genre. Students also apply their understanding of that genre by writing a piece that uses that specific genre as an organizational pattern.

Research and Write

The Research and Write lesson that concludes each book in a theme provides students with an opportunity to show what they have learned. They research additional information about the topic covered in their book and then write in the specific non-fiction form that is the focus of the Genre Study and modelled in the second article.

National Geographic Personalised Learning Theme Sets

The sets enable teachers to deliver the following skills and strategies

Theme Set	Comprehension Focus	Research and write extended writing activity	Writing activity	Additional Writing Activities	Visual Literacy
	P27	P35	P45	P27	P35
Animals in their Habitats	Determining Importance	Create your own Encyclopaedia	Create a book, organise the entries alphabetically.	1. Captions 2. Venn Diagram 3. List and Explanation	Cross-section Diagram
Cells at Work	Synthesising	Create your own Pamphlet	Create a display of pamphlets	1. Concept Web 2. Fact Sheet Cause and Effect Chart	Labelled Diagram
Cultures and Celebrations	Making Inferences	Create your own photo essay.	Create a photo exhibition, including making a catalogue.	1. Chart 2. Captions 3. List with explanation	Comparison Chart
Energy	Determining Importance	Write your own Pro-Con Article	Hold an Energy Debate	1. Label 2. Chart with Examples 3. Descriptive sentences	Photograph Montage
Extreme Weather	Visualising	Create your own Explanation	Present the explanation as part of a TV programme	1. List based on research 2. Chart 3. Short Account	Weather Maps
Life Cycles	Making Connections	Write your own News Report	Create a magazine of news reports	1. Label 2. Venn Diagram 3. List	Flow Diagram
Shaping Earth's Surface	Asking Questions	Write your own Cause and Effect Article.	Create a Cause and Effect Chart	1. Label 2. Diagram with steps 3. Letter	Cutaway Diagram
Using earth's Resources	Inferences	Write your own Problem-Solution article	Create a Poster about your conservation project.	1. List 2. Chart 3. Letter	Resource map

Year 3 Literacy Objectives

National Geographic Personalised Learning Theme Sets fit particularly well with Y3 Literacy Objectives. Extreme Weather links to unit 7 Geography. All other sets can be used in the Information unit.

UNIT	
1. Speaking	
<ul style="list-style-type: none"> Explain process or present information, ensuring items are clearly sequenced, relevant details are included and accounts ended effectively Develop and use specific vocabulary in different contexts 	✓ ✓
2. Listening and responding	
<ul style="list-style-type: none"> Follow up others' points and show whether they agree or disagree in whole-class discussion 	✓
3. Group discussion and interaction	
<ul style="list-style-type: none"> Use talk to organise roles and action Actively include and respond to all members of the group 	✓ ✓
7. Understanding and interpreting texts	
<ul style="list-style-type: none"> Identify and make notes of the main points of section(s) of text Identify how different texts are organised, including reference texts, magazines, leaflets, on paper and on screen Use syntax, context and word structure to build their store of vocabulary as they read for meaning 	✓ ✓ ✓
8. Engaging with and responding to texts	
<ul style="list-style-type: none"> Identify features that writers use to provoke readers' reactions 	✓
9. Creating and shaping texts	
<ul style="list-style-type: none"> Make decisions about form and purpose, and identify success criteria for their writing Write non-narrative texts using structures of different text types Select and use a range of technical and descriptive vocabulary Use layout, format, graphics, illustrations for different purposes 	✓ ✓ ✓ ✓
10. Text structure and organisation	
<ul style="list-style-type: none"> Signal sequence, place and time to give coherence Group related material into paragraphs 	✓ ✓
11. Sentence structure and punctuation	
<ul style="list-style-type: none"> Show relationships of time, reason and cause, through subordination and connectives Compose sentences using adjectives, verbs and nouns for precision, clarity and impact 	✓ ✓

Cultures and Celebrations links to unit 24 Geography for years 1-6 and Unit 5 Citizenship for years 1-6.

Year 4 Literacy Objectives

National Geographic Personalised Learning Theme Sets fit particularly well with Y4 Literacy Objectives. 'Life Cycles' includes a News Report; 'Extreme Weather' has an explanation; and 'Energy' includes pervasive text. 'Animals in their Habitats' links to Science 4B, 'Cells at Work' links to Science 4A. 'Cultures and Celebrations' fits with the RE Unit 4B. All other sets can be used in the information unit.

UNIT	
1. Speaking	
<ul style="list-style-type: none"> Respond appropriately to the contributions of others in light of differing viewpoints Offer reasons and evidence for their views, considering alternative opinions 	✓ ✓
2. Listening and Responding	
<ul style="list-style-type: none"> Listen to a speaker, make notes on the talk and use notes to develop a role-play 	✓
3. Group discussion and interaction	
<ul style="list-style-type: none"> Take different roles in groups and use the language appropriate to them, including the roles of leader, reporter, scribe and mentor Identify the main points of each speaker, compare their arguments and how they are presented 	✓ ✓
7. Understanding and interpreting texts	
<ul style="list-style-type: none"> Identify and summarise evidence from a text to support a hypothesis Use knowledge of different organisational features of texts to find information effectively Use knowledge of word structures and origins to develop their understanding of word meanings 	✓ ✓ ✓
8. Engaging with and responding to texts	
<ul style="list-style-type: none"> Interrogate texts to deepen and clarify understanding and response 	✓
9. Creating and shaping texts	
<ul style="list-style-type: none"> Develop and refine ideas in writing using planning and problem-solving strategies Summarise and shape material and ideas from different sources to write convincing and informative non-narrative texts Choose and combine words, images and other features for particular effects 	✓ ✓ ✓
10. Text structure and organisation	
<ul style="list-style-type: none"> Organise texts into paragraphs to distinguish between different information, events or processes Use adverbs and conjunctions to establish cohesion within paragraphs 	✓ ✓
11. Sentence structure and punctuation	
<ul style="list-style-type: none"> Clarify meaning and point of view by using varied sentence structure (phrases, clauses and adverbials) Use commas to mark clauses and the apostrophe for possession 	✓ ✓

Cultures and Celebrations links to unit 24 Geography for years 1-6 and Unit 5 Citizenship for years 1-6.

Year 5 Literacy Objectives

National Geographic Personalised Learning Theme Sets fit particularly well with Y5 Literacy Objectives. 'Shaping Earth's Surface' links to Science Unit 5E Geography, 'Life Cycles' links to Science 5B, 'Cells at Work' links to Science Unit 5A and includes writing a pamphlet, 'Extreme Weather' includes an explanation, 'Using Earth's Resources' includes a problem solving article, and 'Energy' has a pro-con article. All other sets can be used in the information unit.

UNIT	
1. Speaking	
<ul style="list-style-type: none"> Present a spoken argument, sequencing points logically, defending views with evidence and making use of persuasive language 	✓
2. Listening and Responding	
<ul style="list-style-type: none"> Analyse the use of persuasive language 	✓
3. Group discussion and interaction	
<ul style="list-style-type: none"> Understand different ways to take the lead and support others in groups 	✓
7. Understanding and Interpreting Texts	
<ul style="list-style-type: none"> Make notes on and use evidence from across a text to explain events or ideas Compare different types of narrative and information texts and identify how they are structured 	✓ ✓
9. Creating and Shaping Texts	
<ul style="list-style-type: none"> Vary the pace and develop the viewpoint through the use of direct and reported speech, portrayal of action and selection of detail 	✓
10. Text Structure and Organisation	
<ul style="list-style-type: none"> Experiment with the order of sections and paragraphs to achieve different effects Change the order of material within a paragraph, moving the topic sentence 	✓ ✓
11. Sentence Structure and Punctuation	
<ul style="list-style-type: none"> Adapt sentence construction to different text-types, purposes and readers Punctuate sentences accurately, including using speech marks and apostrophes 	✓ ✓

Cultures and Celebrations links to unit 24 Geography for years 1-6 and Unit 5 Citizenship for years 1-6.

Year 6 Literacy Objectives

National Geographic Personalised Learning Theme Sets fit particularly well with Y6 Literacy Objectives. 'Using Earth's Resources' links to unit 15 Geography, 'Energy' also includes the opportunity for a debate and links to Science Unit 6E, 'Life Cycles' include a news report. All other sets can be used in the information unit.

UNIT	
1. Speaking	
<ul style="list-style-type: none"> Use a range of oral techniques to present persuasive arguments and engaging narratives ✓ Participate in whole-class debate using the conventions and language of debate, including standard English ✓ Use the techniques of dialogic talk to explore ideas, topics or issues ✓ 	
2. Listening and Responding	
<ul style="list-style-type: none"> Make notes when listening for a sustained period and discuss how note-taking varies depending on context and purpose ✓ Analyse and evaluate how speakers present points effectively through use of language and gesture ✓ Listen for language variation in formal and informal contexts ✓ Identify the ways spoken language varies according to differences in the context and purpose of its use ✓ 	
7. Understand and Interpret Texts	
<ul style="list-style-type: none"> Appraise a text quickly, deciding on its value, quality or usefulness ✓ Understand underlying themes, causes and points of view ✓ Recognise rhetorical devices used to argue, persuade, mislead and sway the reader ✓ 	
9. Creating and Shaping Texts	
<ul style="list-style-type: none"> In non-narrative, establish, balance and maintain viewpoints ✓ Select words and language drawing on their knowledge of literary features and formal and informal writing ✓ 	
10. Text Structure and Organisation	
<ul style="list-style-type: none"> Use varied structures to shape and organise text coherently ✓ 	
11. Sentence Structure, Punctuation	
<ul style="list-style-type: none"> Express subtle distinctions of meaning, including hypothesis, speculation and supposition, by constructing sentences in varied ways ✓ Use punctuation to clarify meaning in complex sentences ✓ 	

Cultures and Celebrations links to unit 24 Geography for years 1-6 and Unit 5 Citizenship for years 1-6.

NATIONAL
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THEME SETS

Life Cycles

TEACHING GUIDE



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About the Programme

'Making A Difference Means Making It Different.'

From Position Statement of International Reading Association (March 2000)

One size does not fit all

Today's students come from a variety of cultural and language backgrounds, socioeconomic levels and academic levels. Educators realize one size does not fit all, so no one book can meet the needs of all students.

The **Theme Sets** programme provides differentiated resources for teachers to meet the diverse needs of their students. Each **Theme Set** provides four books crafted to match the wide range of reading levels within each classroom. All books provide the same core concepts but within different contexts and at different reading levels. For students who struggle with

content-area textbooks, the **Theme Sets** provide core curriculum that is broken down, not watered down. For students who are on track with their reading, the **Theme Sets** provide literacy and core content curriculum with appropriate challenge and support. For students who need more challenging material, the **Theme Sets** provide literacy and core content in ways that develop students' critical thinking skills.

Equity in education is every child's right

Equity in education is tied to students' access to quality curriculum, materials and teaching. Yet students, especially those who struggle with reading, are often denied access to core content. It is essential that these students have access to an age-related curriculum to prevent the knowledge gap from widening as they proceed through the grades. The **Theme Sets** offer on-level curriculum to students across a wide range of reading levels. The **Theme Sets** also support students as they develop reading and writing strategies and skills.



Programme Components

Student Books

Each **Theme Set** includes four books on different topics. Each book is written at a different reading level and focuses on a specific topic to explain and illustrate the central theme.

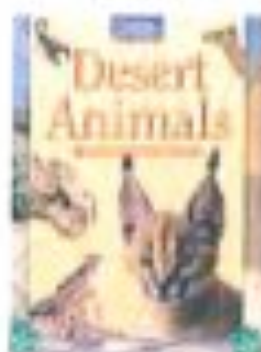
All four books are firmly connected together. They all develop a common set of **Key Concepts** and core vocabulary. The goal is that all students acquire essential core content at their own reading levels.



Level A



Level B



Level C



Level D

Themes	Book Titles			
	Level A	Level B	Level C	Level D
Animals in Their Habitats	Forest Animals	Ocean Animals	Desert Animals	Rainforest Animals
Cells at Work	Skin	Muscles	Blood	Bone
Cultures and Celebrations	Mexico	Italy	Japan	Egypt
Energy	Energy in the Home	Energy in the Factory	Energy at the Airport	Energy at the Sports Arena
Extreme Weather	Droughts	Floods	Tornadoes	Hurricanes
Life Cycles	Great Frogs	Bowhead Butterflies	Pinkie Gull Frog	Kamohi Dragon
Shaping Earth's Surface	Wind	Water	Ice	Earthquakes and Volcanoes
Using Earth's Resources	Indonesia's Rainforests	Greenland's Ocean Region	Australia's Deserts	Peru's Mountains

Placing Students in Levels

Matching books to readers is critical in any successful reading programme. Selecting books that students can read and want to read involves ongoing assessment of students' reading abilities, an awareness of students' interests, and the ability to judge the difficulty levels of texts.

Student Reading Ability

Use the assessment tools and student records available in your school as one source of information to determine a student's individual reading level. Consider also students' reading habits, self-selected reading books and other information in students' reading portfolios. If you are unsure of the **Theme Set** level a student should be reading, you can have a student read the first 100 words to you orally. If the student reads with less than 90 per cent accuracy, place the student in an easier level. If the student reads with 95 per cent or greater accuracy, place the student in a more difficult level. Reassess student placement periodically.



Use Level A with

- students who are reading well below expected level.
- students who generally have limited vocabulary and background knowledge.
- students who generally are most successful with familiar words that are easy to decode and within their oral vocabulary.
- students who are most successful with text that uses short and simple sentence structures with straightforward syntax.
- students who understand content best when the text uses concrete examples to explain concepts.
- students with reading levels that range from 7.5 to 8.5.



Use Level B with

- students who are reading at or below expected level.
- students who can read two-syllable words that are easy to decode and within their oral vocabulary.
- students who best understand text that uses mostly short, simple sentences with straightforward syntax.
- students who understand concepts that are explained carefully and use some concrete examples.
- students with reading levels that range from 8.5 to 9.5.

Student Interest and Motivation

Students who are particularly interested in a topic often bring rich background knowledge to that topic. They are motivated to read more about the topic. This prior knowledge and motivation can allow readers to stretch beyond their overall reading level. In assigning books to students, consider special interest and knowledge.

Some students may be interested in reading about a topic in a **Theme Set** that is above their reading ability. Provide these students with additional scaffolding and support before, during and after reading.

Theme Set Reading Levels

The four books in each **Theme Set** provide a range of reading levels to facilitate differentiated instruction. However, while Levels A and B are written for struggling readers, they do not look like typical easy-to-read texts. Because of the importance for students to read and learn critical content vocabulary, on-level content vocabulary was used in Levels A and B. This critical vocabulary was then surrounded by easy-to-read text. Use these guidelines to match students with levels.



Use Level C with

- students who are reading at or above expected level.
- students who have a good grasp of common vocabulary and are able to use context and other resources to unlock the meaning of technical content words.
- students who can understand simple and most complex sentence structures.
- students who, with appropriate support, can understand abstract concepts.
- students with reading levels that range from 9.8 to 10.9.



Use Level D with

- students who are your strongest readers.
- students who have well-developed vocabularies and broad background knowledge about a range of topics.
- students who are able to understand most complex sentence structures used in expository writing.
- students who can grasp abstract concepts with appropriate support.
- students with reading levels that range from 11.0 to 11.9.

Differentiated Theme Sets to support and develop literacy skills.
High Interest with Lower Reading Ages.

Animals in their Habitats - Example of differentiating text and sentence structure per Theme Set. Pages 12-13 of all four books look at how animals adapt to their habitat. Also shown are examples from the Teaching Guide that are relevant to all four titles.



Forest Animals - p12-13
• Easiest Reading Age 7.6-8.5



Ocean Animals - p12-13
•• Moderate Reading Age 8.5-9.5



Desert Animals - p12-13
••• Challenging Reading Age 9.8-10.9



Rain Forest Animals - p12-13
•••• Difficult Reading Age 11.0-11.9

The number of dots on the back of the book denotes level of ability.

• Easiest Reading Age 7.6-8.5 •• Moderate Reading Age 8.5-9.5 ••• Challenging Reading Age 9.8-10.9 •••• Difficult Reading Age 11.0-11.9

1

•Introduce Theme and Books

•Begin Reading: Pages 6-16

•Check Understanding

Introduce the Theme

Activate Prior Knowledge

Explain that everyone will be reading about the life cycle of an animal. Some students will be reading about giant pandas, while others will be reading about monarch butterflies, poison dart frogs or Komodo dragons. Explain that all animals, including humans, go through life cycles. Ask:

What are some of the changes that happen to a person as he or she grows up?

How is an adult person different from a baby?

Distribute the *Pre-reading Master* found in this Teacher's Guide, page 47. You may want to create a transparency to model filling in the Master with students.

Write *life cycle* on the board. Explain that the life cycle of an animal is the set of stages it goes through in its lifetime. Be sure students understand that one animal's life cycle will end when its life ends but that the life cycle of a type of animal is continuous because adult animals give birth to baby animals. Ask students to suggest what they know about life cycles.

Ask students what they think of when they think about the human life cycle. With the class, make a list of the ways humans change as they grow. At the end of this Lesson, students will fill in information about the animal they will read about. They can continue to add to their lists as they learn new information about the topic. They can also compare the life cycle of humans to that of the animal they read about when they have finished reading.

Introduce the Books

Preview the Books

Have students flip through their books, paying attention to titles, headings, maps, photographs, captions and diagrams. Invite students to identify photographs or other parts of the book that seem interesting or familiar to them.

Explain that the first article starting on page 6 and ending on page 16 is an informational article. It gives the kind of information you might find in a report. The headings and subheadings give clues about what the text describes and explains. Ask students to predict what kind of information they might find out when reading this article.

Then have students turn to page 21. Have them examine pages 21 to 26. Tell students that this type of article could be found in a newspaper or magazine. Ask:

How is the information in this article organized?

Does this kind of article remind you of other books or materials you have read?

Point out that knowing how an article is organized helps students better understand the information in an article.

Name _____ Book title _____

Comprehension Model: Making Connections

The Life Cycle of a Dog

What's your favourite type of dog? Do you like little poodles that can sit on your lap? Or do you like big sheep dogs that like to play fetch? No matter how big or how small, all dogs have some things in common. All dogs begin their **life cycles** as small puppies. A newborn puppy cannot see or hear. Instead, a puppy uses her sense of smell to find her mother.

As the puppy gets older, her **physical features** begin to change. The puppy's fur gets thicker and her body gets bigger. Soon her eyes open and she can see and hear.

As the puppy runs and plays with other puppies, she learns how to behave with other dogs. This is a **learned behaviour**.

At about one year old, the puppy is a fully grown dog. But it is not until the dog is three years old that she mates with another dog to have her own puppies. This is called **reproduction**. Her puppies will grow up to repeat the life cycle of a dog.

It takes about a year for a puppy to become a full-grown dog.



Steps for Making Connections

- Read carefully to see what the words remind you of.
- Connect what you read to your own experiences.
- Connect what you read to something else you have read.

Name _____ Book title _____

Comprehension Strategy: Making Connections

Use this chart as you read. Write a brief description of something in the text you connected with in column 1. Write your connection in column 2.

Ideas from text	Connections I made

•Introduce Genre Study

•Begin Reading: Pages 21–26

•Check Understanding

Introduce Genre Study

News Report

Explain to students that authors have varied purposes for writing. Authors can choose the writing form that best suits the purpose for writing. These different forms of writing are called genres. Say:

Writers use different forms, or genres, depending on their purpose for writing. Today we are going to learn about a genre, or type of writing, called news reports. News reports give interesting information about current events or topics in the news.

Then have students turn to page 20 of their books. Read page 20 to the class. Say:

Look at this flow chart. It shows the main parts of a news report: the headline, lead and body paragraphs. Each part serves a different purpose. For example, the headline gets the reader interested in the article.

Discuss the other parts of a news report with the class.

Next, have students turn to page 21. Explain to students that they will be reading a news report about the type of animal they read about in the informational article.

Then read and discuss the different labels shown on page 21, which identify and describe some parts of a news report.

Remind students that news reports are organized with the headlines, a lead, body paragraphs, photographs with captions, quotations and subheads.



Name _____ Book title _____

Prewriting

You will be writing a news report. Your report should include information about a current event or topic in the news. Use the news report beginning on page 21 as a model.

My topic: _____

Date of the event: _____

Interesting facts about my topic: _____

Quotations to use and who said them: _____

Subheads I plan to include: _____

Other important information to include: _____

Name _____ Book title _____

Content Reading Guide: News Report

You can read news reports to find out brief but important information about a topic. As you read pages 21–26 in your book, look for information related to the Key Concept statements. Then write information you find in the news report that relates to the Key Concepts and tell which Key Concept it relates to.

Topic: _____	
Information	Related Key Concept



Introduce Research and Write

Explain that students will write their own news reports.

Have students turn to the Research and Write activity beginning on page 28 in their books. Explain that students will be working on steps 1–3 today and steps 4 and 5 in the next writing lesson. Then say:

I am going to read the introduction on page 28 of the Giant Pandas book. This introduction mentions giant pandas, but the rest of the information is the same in every book. Follow along silently as I read to the class.

Read the introduction and allow time for students to ask questions.

1. Study the Model

Read step 1 to the class. Then have students turn to page 21. Say:

On this page, you will find the beginning of a news report. We are going to use the news report on pages 21–26 as a model for writing our own news reports.

Look at the headline. Notice how the headline is in large letters and easy to read. Headlines should identify the topic in a way that will attract the reader's attention. The news reports you write should have a headline that will make the reader interested in reading your news report.

Continue in this way with each of the important parts of the news report. Then flip through the article to find the other important parts of the news report.

Writing a News Report

- Choose a current event or topic in the news.
- Use a headline that grabs readers' attention.
- Write the most important information in the lead.
- Include quotations from people who know about the topic.

2. Choose Your Topic

Explain to the class that steps 2 and 3 have suggestions for conducting research.

Read the second step to the class. Remind students that they should find a topic that is a current event or topic in the news, and it should be related to animals.

3. Research Your Topic

Read step 3 to the class. Distribute the Prewriting Master to students. Explain that they will use this Master to organize their research and take notes. Read the introduction on the Master and discuss each part.

Students can work in pairs or independently to review the model and conduct research. Students can ask a classmate to help answer questions they may have. As students conduct research, circulate around the classroom to check that students are using the Prewriting Master correctly.

Check Progress

Bring the class together to discuss students' progress. Ask questions such as:

Has everyone chosen a topic and completed his or her research?

Are you finding enough information about your topic?

Remind students that they will have time to write, revise and edit. They will then create a magazine of news reports.

Create a Magazine of News Reports

As a class, have students turn to page 30 in their books. Read page 30 aloud to the class as students follow along silently. Explain that students will work in small groups to organize a magazine.

Explain to students that each student will work independently to prepare his or her news report to share.

Review the following steps with the class so that students understand each step in the process. Each student should participate in all the steps.

Individual Work

Step 1. Look at a news magazine. Study the contents page and notice how the articles are arranged.

Step 2. Type your article. Type your article in two columns to look more like an article in a news magazine.

Step 3. Find a photograph to go with your article. Use the Internet, newspapers or magazines to find photographs to go with your news report.

Step 4. Write a caption for your photograph.

Class Work

After each student has completed all four steps, bring the class together to discuss the process. Have the class put the news reports together and number the pages. Create a table of contents. Have students refer to books for examples if necessary.

Then decide as a class what the name of the magazine should be, and put the title at the top of the cover. Then find a picture from one of the news reports to go on the cover.

After the cover photograph is chosen, explain that now you will bring all the parts of the magazine together and bind them. You can staple the pages or punch holes and tie the pages together.

Display the Class Magazine

After the project is completed, allow students to review the magazine over the next few days. Students can work independently or in pairs to answer the following questions in their notebooks:

What did you like most about creating a news report?

What did you learn from making the magazine?

Did you learn something new from someone else's news report?

When might you refer to a news magazine?

After a few days, bring the class together to discuss the magazine. Ask volunteers to comment on the magazine.

Supporting Pupils with English as an Additional Language

To be successful in mainstream classrooms, students acquiring English need to learn on-level content as they learn language. The **Theme Sets** provide all students with access to on-level content while supporting the development of language and literacy skills. The unique instructional design of the **Theme Sets** supports pupils with English as an additional language by providing the strategies and scaffolding they need.

Scaffold the Content

Target Key Concepts

EAL Learners benefit from instruction that isolates and makes explicit the big ideas of the lesson. Key Concepts are highlighted on the pages and taught through concrete examples and visuals.

Develop Key Vocabulary

EAL Learners need to build their academic vocabulary to access on-level content. In the **Theme Sets**, Key Vocabulary is highlighted in the text and defined on the page. Key Vocabulary is repeated frequently.

Provide strong picture support

Striking National Geographic photos and illustrations support the text and concepts in comprehensive ways.



Develop visual literacy skills

Lessons in visual literacy offer explicit instruction on how to understand and interpret information presented in diagrams, maps, charts and other visuals.





Scaffold the Instruction

Build background

Background knowledge for Key Concepts is carefully developed in the Student Books to ensure that students understand the big ideas.

Activate prior knowledge

The lesson notes for each theme provide detailed suggestions for connecting what students already know to what they are learning.

1

Introduce the Theme **2** **Connect the Books** **3**

Activate Prior Knowledge

Use the following questions to activate students' prior knowledge of the theme. Encourage students to share their thoughts and ideas.

Process the Books

Use the following questions to process the books. Encourage students to share their thoughts and ideas.

Book	Key Concepts	Connections



Supporting Pupils with English as an Additional Language

EAL

Scaffold the Instruction

Teach comprehension strategies

The **Theme Sets** programme helps students develop those learning strategies that empower students to become more independent and self-directed in their learning. Each theme provides explicit instruction and practice in one comprehension strategy. Graphic organizers help students use the strategy to understand the content.

1

Show the Strategy

Read the text aloud to the class. As you read, think aloud about the strategy you are using to understand the text.

As you read, think about how you are using the strategy to understand the text. Think about how you are using the strategy to understand the text.

As you read, think about how you are using the strategy to understand the text. Think about how you are using the strategy to understand the text.

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As you read, think about how you are using the strategy to understand the text. Think about how you are using the strategy to understand the text.

Teach Key Vocabulary

Read the text aloud to the class. As you read, think about the key vocabulary words you are using to understand the text.

As you read, think about how you are using the key vocabulary words to understand the text. Think about how you are using the key vocabulary words to understand the text.

As you read, think about how you are using the key vocabulary words to understand the text. Think about how you are using the key vocabulary words to understand the text.

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Word	Definition	Example

OCEN SKILLS **Apply Now**

Use the strategy you learned in the lesson to understand the text. Think about how you are using the strategy to understand the text.

Vocabulary: Using Context Clues

Use the strategy you learned in the lesson to understand the text. Think about how you are using the strategy to understand the text.

Word	Using Context Clues	Definition Clues
1. active		
2. connect		
3. value		
4. leadership		
5. focus		
6. impact		
7. partner		



Focus on vocabulary

Rapid vocabulary acquisition is critical to academic success for EAL Learners. Not only do EAL Learners need to close the initial vocabulary gap with native speakers, but they must also keep pace with native speakers by steadily expanding their vocabularies. The **Theme Sets** programme offers a rich array of instructional opportunities for EAL Learners to acquire academic vocabulary. These include:

Preteach Vocabulary Key Vocabulary is explicitly taught before reading.

Provide a Rich Context for Words New words are embedded in rich context to ensure that students develop a deeper understanding of these words.

Multiple Exposures and Opportunities to Use Words

The text of the **Theme Sets** is carefully crafted to ensure repeated use of Key Vocabulary so students see words used in different contexts. Throughout the lessons, students are engaged in activities and games that provide rich opportunities to explore and use new vocabulary words.

Assessing Progress

Assessment provides teachers with valuable information to help plan instruction and measure progress over time. An assessment programme needs to be ongoing so that changes over time in students' learning can be noted. An assessment programme needs to include both formal and informal tools so that evaluation of performance is reliable and useful.

The **Theme Sets** programme helps you informally assess student progress in both content-area knowledge and literacy development. The following informal assessment opportunities are built into each **Theme Set**.

Student Book Assessment Tools

Think About Key Concept Questions At the end of the first informational article in each **Theme Set**, a common set of questions taps into the students' knowledge of the three Key Concepts. The Teaching Guide provides an Assessment Check and sample answers for the four books in each theme. See pages 32–33.

Key Concept Activities At the end of the second article, in each **Theme Set**, three activities provide opportunities for students to demonstrate their understanding of the Key Concepts. These activities tap into the various learning styles. The Teaching Guide provides an Assessment Check to evaluate student products. See page 30.

Research and Write The writing activity that concludes each book allows students to demonstrate what they have learned about the content as well as produce a specific non-fiction writing form. A rubric for evaluating the writing is provided in the Assessment Check in the Teaching Guide. See page 44.

Apply the Key Concepts

- Key Concept 1: Interdependence** - Interdependence exists when two or more things are connected in a way that affects each other.
- Key Concept 2: Change** - Change is a process that occurs over time. It can be gradual or sudden.
- Key Concept 3: Adaptation** - Adaptation is a change in an organism's traits that helps it survive in its environment.

Key Concepts

- Interdependence**
- Change**
- Adaptation**

Activities

- 1. Write a paragraph about how two different organisms depend on each other.
- 2. Draw a picture of a change that has occurred in your environment.
- 3. Write a story about an animal that has adapted to its environment.

Key Concepts

- Interdependence**
- Change**
- Adaptation**

Activities

- 1. Write a paragraph about how two different organisms depend on each other.
- 2. Draw a picture of a change that has occurred in your environment.
- 3. Write a story about an animal that has adapted to its environment.

Teaching Guide Assessment Tools

Open-Book Test In each Teaching Guide, an Open-Book Test is provided as a blackline master. This test is constructed to help evaluate not only what students have learned but also how effectively students can read to find specific information. A full answer key is provided for all four books in the theme. See pages 61 and 62–63.

Open-Book Test

OPEN-BOOK ACTIVITY






Directions: Read the text in the Open-Book Test. Answer the questions that follow. You may use the text to help you answer the questions. You may also use your own knowledge to help you answer the questions.

Question	Answer	Question	Answer	Question	Answer
1. What is the main idea of the text?		2. How do you think the author feels about the topic?		3. What is the author's purpose for writing this text?	
2. Why do you think the author wrote this text?		4. How do you think the author feels about the topic?		5. What is the author's purpose for writing this text?	
3. How do you think the author feels about the topic?		6. How do you think the author feels about the topic?		7. What is the author's purpose for writing this text?	
4. How do you think the author feels about the topic?		8. How do you think the author feels about the topic?		9. What is the author's purpose for writing this text?	
5. What is the author's purpose for writing this text?		10. How do you think the author feels about the topic?		11. What is the author's purpose for writing this text?	
6. How do you think the author feels about the topic?		12. How do you think the author feels about the topic?		13. What is the author's purpose for writing this text?	
7. What is the author's purpose for writing this text?		14. How do you think the author feels about the topic?		15. What is the author's purpose for writing this text?	
8. How do you think the author feels about the topic?		16. How do you think the author feels about the topic?		17. What is the author's purpose for writing this text?	
9. What is the author's purpose for writing this text?		18. How do you think the author feels about the topic?		19. What is the author's purpose for writing this text?	
10. How do you think the author feels about the topic?		20. How do you think the author feels about the topic?		21. What is the author's purpose for writing this text?	

Open-Book Test

OPEN-BOOK ACTIVITY

Directions: Read the text in the Open-Book Test. Answer the questions that follow. You may use the text to help you answer the questions. You may also use your own knowledge to help you answer the questions.

1. What is the main idea of the text?

2. Why do you think the author wrote this text?

3. How do you think the author feels about the topic?

4. How do you think the author feels about the topic?

5. What is the author's purpose for writing this text?

6. How do you think the author feels about the topic?

7. What is the author's purpose for writing this text?

8. How do you think the author feels about the topic?

9. What is the author's purpose for writing this text?

10. How do you think the author feels about the topic?

11. What is the author's purpose for writing this text?

12. How do you think the author feels about the topic?

13. What is the author's purpose for writing this text?

14. How do you think the author feels about the topic?

15. What is the author's purpose for writing this text?

16. How do you think the author feels about the topic?

17. What is the author's purpose for writing this text?

18. How do you think the author feels about the topic?

19. What is the author's purpose for writing this text?

20. How do you think the author feels about the topic?

21. What is the author's purpose for writing this text?

Name _____ Book title _____

Open-Book Activity

- All the stages in an animal's life are called its _____.
- The making of offspring, or babies, is called _____.
- The parts of an animal's body that can be seen are called its _____
_____.
- Animals have ways of acting that they are born with called _____
and ways of acting that they learn during their lifetime called _____.
- What are the four stages in every animal's life cycle? _____
_____.
- How does the animal you read about change throughout its life? _____

_____.
- What are some inherited and learned behaviours of the animal you read about?

_____.
- Look at the genre article beginning on page 21. What is the headline of this news report?
_____.
- What are the important parts of a news report? _____

_____.
- What is one thing you found interesting in the news report? _____

_____.

Distribute the Open-Book Test Master to students. This allows students to demonstrate both their understanding of the content and their ability to read for specific information. Students should work quietly and independently to complete this test during this 20-minute period.



Questions

- All the stages in an animal's life are called its [life cycle].
- The making of offspring, or babies, is called [reproduction].
- The parts of an animal's body that can be seen are called its [physical features].
- Animals have ways of acting that they are born with called [inherited behaviours] and ways of acting that they learn during their lifetime called [learned behaviours].
- What are the four stages in every animal's life cycle? [birth, growth, reproduction and death]

6. How does the animal you read about change throughout its life?

A panda cub's skin changes colour. The fur on its legs turns black and it grows teeth. It then learns to walk. It is an adult when it is four years old.

7. What are some inherited and learned behaviours of the animal you read about?

Pandas inherit the ability to communicate with their voices and learn which bamboo to eat.

8. Look at the genre article beginning on page 21. What is the headline of this news report?

Panda Party at the Zoo

9. What are the important parts of a news report?

date, headline, lead, photographs, captions, body paragraphs, subheads and quotations

10. What is one thing you found interesting about this news report?

Answers will vary.

Activity Masters

Masters	Purpose
Prereading: Comparison Chart	Provides a tool for recording students' prior knowledge about the topic before they read
Giant Pandas Vocabulary Monarch Butterflies Vocabulary Poison Dart Frogs Vocabulary Komodo Dragons Vocabulary	Provides a tool for developing strategies for book-level vocabulary
Comprehension Model	Provides a Master that can be made into a transparency to model the comprehension strategy
Comprehension Strategy	Provides a tool to help students practise the comprehension strategy
Word Cards, Giant Pandas Word Cards, Monarch Butterflies	Provides cards that can be cut out and used to develop vocabulary
Share Learning	Provides a tool students can use in small groups to compare content across all Student Books
Key Concept Questions	Provides a tool students can use in small groups to answer the Key Concept questions shown on page 17 in the Student Book
Fluency Practice	Provides a tool for pairs of students as they reread the text to improve fluency
Content Reading Guide	Provides a tool to help students record specific information
Prowriting	Provides a tool for organizing students' ideas before they write
Open-Book Activity	Provides an opportunity for students to demonstrate both their understanding of the content and their ability to read for specific information

Features included in the books are

- Teaching Notes on inside front cover of each book, including list of vocabulary and synopsis of the book
- Contents page
- Headings and captions
- Maps with keys
- Diagrams
- Labels
- Instructions on how to complete different types of writing activities
- Glossary
- Index

Key Science Concepts

Animals in Their Habitats	<ul style="list-style-type: none"> • Animals interact with their environment and with other animals in their habitats • There are many different habitats on Earth. Animals live in habitats that meet their needs • Adaptations help animals survive in their habitats
Cells at Work	<ul style="list-style-type: none"> • All organisms are made up of cells that carry out processes that are needed to live • Specialised cells perform specialised functions in organisms • Sometimes cells get a disease or become damaged and don't function as they should
Energy	<ul style="list-style-type: none"> • Energy is the ability to do work • There are different forms and sources of energy • Energy can change from one form to another
Extreme Weather	<ul style="list-style-type: none"> • Conditions in the atmosphere, such as air pressure, create weather • Clouds give meteorologists clues about what is happening in the atmosphere • Tools and technology help meteorologists gather data about weather
Life Cycles	<ul style="list-style-type: none"> • The life cycle of animals moves through birth, growth, and reproduction, and ends at death • The physical features of all animals change as they grow, but some animals change more than others • Inherited behaviours are passed to offspring. Learned behaviours are taught
Shaping Earth's Surface	<ul style="list-style-type: none"> • Different forces shape the landforms that make up Earth's surface • Earth's surface changes in different ways • people try to control, or at least understand, the effect of forces that shape earth's surface
Using Earth's Resources	<ul style="list-style-type: none"> • Earth provides many natural resources that people can use • Different resources are useful to people in different ways • Conservation and recycling can help save resources

Key Humanities Concepts

Cultures and Celebrations	<ul style="list-style-type: none"> • Every society has a way of life that people share. This way of life makes up its culture • Culture and celebrations help create a sense of national identity among people • Some parts of culture change, but modern and traditional activities can exist side by side
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Developing Literacy Skills

The **Theme Sets** programme supports developing readers and writers by providing appropriate scaffolding and challenges that match the needs of a wide range of students.

Comprehension

Each theme targets one specific comprehension strategy so that students learn and apply that strategy as they read. These strategies include determining importance making connections, visualising, asking questions, making inferences and synthesising. Teaching notes provide step-by-step help for explicit instruction, modelling, guided practice and independent practice.

Vocabulary

Within each theme, essential content words are targeted as Key Vocabulary and explicitly taught to all students before reading. As students read, they encounter these words repeatedly within rich contexts and have opportunities to use the words in oral and written activities. In addition to the Key Vocabulary covered in all four books, specific book-level words are taught and used in small-group and independent activities.

Visual Literacy

Understanding how to read diagrams, maps, graphs, charts and other visual aids is critical to comprehending non-fiction. Each theme provides explicit instruction and practice in one kind of visual aid so that students learn how to extract and interpret information that is presented visually.

Text Structure and Genres

For each theme, the characteristics of one non-fiction genre/text structure are explicitly taught in the Genre Study. The second article in each Student Book serves as a model of that genre. Students also apply their understanding of that genre by writing a piece that uses that specific genre as an organizational pattern.

Research and Write

The Research and Write lesson that concludes each book in a theme provides students with an opportunity to show what they have learned. They research additional information about the topic covered in their book and then write in the specific non-fiction form that is the focus of the Genre Study and modelled in the second article.

Contact these Pilot Schools who already use National Geographic Personalised Learning Theme Sets and find out how they use them in their classrooms!

Mrs L Lawson
Head Teacher
Lydney C. of E. School
Bream Road
Lydney
Gloucestershire
GL15 5JH
Tel. 01594 842 172

Ms D Bhalla
Starks Field Primary
167 Church Street
Edmonton
London Ng 95J
Tel. 0208 887 6060

“National Geographic has a solid, global reputation that’s second to none, so they aren’t going to put their name to something that doesn’t deliver the goods. *Cells at Work* is a collection of four books and teachers’ notes that explains the systems of four different types of cells: skin, muscle, blood and bone. These will help you and your pupils understand more about what makes us tick and what cells do what.

Every set consists of four books, which are written at four different reading levels from A to D, each placing the spotlight on a particular topic to explain and demonstrate the central theme within a shared reading context – where four different ability levels read four different topics and come together to share ideas.

The theme sets strive hard to weave science and literacy skills together. Each of the pupil books contain overt coaching in one visual literacy skill, such as how to read a labelled diagram. Tick. Then there is a genre study built-into each book which defines and explains a non-fictional writing form such as an informational pamphlet. Tick. There is a Research and Write section in each book so that pupils have the opportunity to practise and build-on what they have learned. Tick. In fact, the ticks keep on going. Key concepts are consistently well explained. Pictures and diagrams are engaging and illustrate the content with panache. There are plenty of thinking questions asked within the books, there are activities to try, ideas for sharing what you have learnt and helpful glossaries. Added to this, the books are colourful, well set out and visually attractive.

In the teaching guide you will find plenty of sound, comprehensive teaching tips and guidelines linked to assessment for learning principles such as KWL grids (What we Know, What we Want to know, What we Learned). There are various suggestions included within well written notes that focus your mind on imaginative ways of fusing science and English together in order to develop key literacy skills. The activity masters include comprehension models (drawing on Bloom’s taxonomy), comprehension strategies, word cards, content reading guides, prewriting and open-book activities. The teaching notes are well-structured, easy to use and a good source of ideas.

The books all dive deep and offer more information than is needed at Key Stage 2. Having said that, they’d be ideal for the Gifted and Talented children in your school who would lap up the detail. I like the ‘one size does not fit all’ approach. The teaching notes are well meaning, well written and packed with great ideas for erasing the lines drawn between science and literacy in a pigeon-holed curriculum.”

Ideal for mixed ability groups at Primary KS2



Great for Secondary Learning Support KS3

