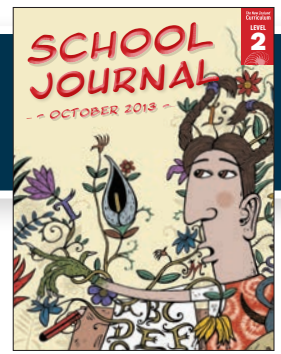


Nasty Nits

by Sylvia Thomas

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Year 4



Overview

All children know about head lice, and most will want to find out more about them. The detailed information will have a “yuck” appeal to children, but the text doesn’t make judgments about students who might be suffering from head lice.

The text provides scientific information in an informal way and is well supported with headings, photographs, labelled diagrams, and fact boxes. The headings and style of writing are humorous and informal, engaging students’ interest and showing that science can be fun.

Students will be able to make many connections with the text, including their own experiences of head lice, of other insects, and of other scientific explanations.

There are opportunities to support students as they learn to locate and integrate information from two or more places within the text to answer their questions.

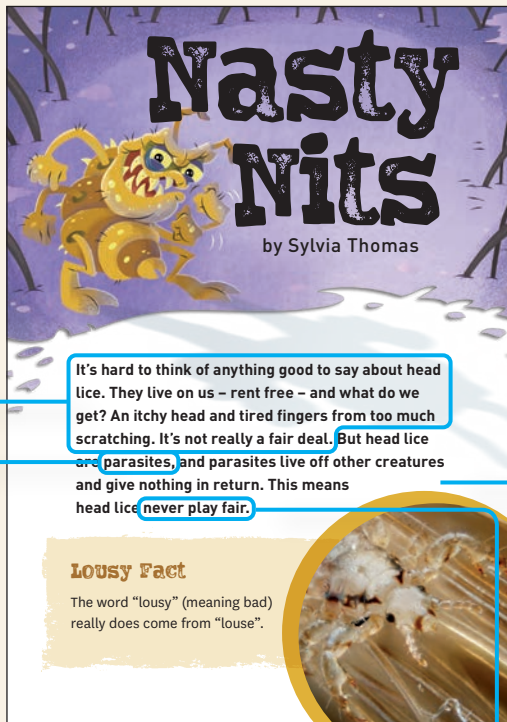
Texts related by theme “Crocodile Crèche” SJ 1.3.10 | “The Bat That Walks on the Ground” SJ L2 April 2013

Text characteristics from the year 4 reading standard

some abstract ideas that are clearly supported by concrete examples in the text or easily linked to the students’ prior knowledge

a straightforward text structure, such as a structure that follows a recognisable and clear text form

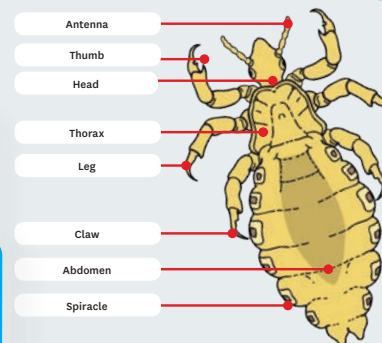
some compound and complex sentences, which may consist of two or three clauses



Short and Stumpy

Head lice are small insects that live in a person's hair or on their scalp. In fact, a head louse can spend its whole life on one head. This is because head lice feed on only one kind of blood: human blood (unlike fleas, which can survive on the blood of animals or people).

Head lice live in one place for another reason. They have no wings. When you're only the size of a pinhead, it's difficult to get around. Like all insects, head lice have six legs attached to a thorax. These legs are short and stumpy, so they're not much use for jumping or even walking. Head lice can move from one person's head to another only when two people are very close to each other.



some words or phrases that are ambiguous or unfamiliar to the students, the meaning of which is supported by the context or clarified by photographs, illustrations, diagrams, and/or written explanations

figurative language, such as metaphors, similes, or personification

other visual language features that support the ideas and information, for example, text boxes or maps

Reading standard: by the end of year 4

Possible curriculum contexts

SCIENCE (Living World)

Level 2 – Ecology: Recognise that living things are suited to their particular habitat.

ENGLISH (Reading)

Level 2 – Ideas: Show some understanding of ideas within, across, and beyond texts.

ENGLISH (Writing)

Level 2 – Ideas: Select, form, and express ideas on a range of topics.

Possible reading purposes

- To learn about head lice and their life cycle
- To find out why our heads are the ideal habitat for head lice.

See [Instructional focus – Reading for illustrations](#) of some of these reading purposes.

Possible writing purposes

- To write about another creature whose life cycle involves humans (or another parasite)
- To write a play, poem, or other creative interpretation of the article
- To reuse information from the article in a different format, such as a leaflet or poster.

See [Instructional focus – Writing for illustrations](#) of some of these writing purposes.

Text and language challenges

VOCABULARY:

- Possibly unfamiliar words and phrases, including “parasites”, “scalp”, “pinhead”, “thorax”, “abdomen”, “antennae”, “spiracles”, “mouthparts”, “saliva”, “clotting”, “nymphs”, “shed”, “ancient Romans”, “Aristotle”
- Colloquial expressions, including “rent free”, “a fair deal”, “play fair”, “lousy”
- The pun: “born to bug us”
- The singular and plural forms: “louse” and “lice”.

Possible supporting strategies

Review the names of insect body parts and their life cycles. List those that will appear in the article to support students who may not be familiar with them. Some students may be confused by the use of “nits” and “louse”: page 28 explains the difference.

If students find the colloquial expressions challenging, provide a brief explanation and give examples in different contexts. Ask if they know of similar expressions in other languages, and provide opportunities for the students to practise using the expressions.

The words relating to history in the final section may be challenging. They are not high-priority words for learning, so if necessary, give a brief explanation to help students make the connections between ancient and modern experiences of head lice. *The English Language Learning Progressions: Introduction*, pages 39–46, has useful information about learning vocabulary.

SPECIFIC KNOWLEDGE REQUIRED:

- Experience or knowledge of head lice
- Knowledge of insect structures and life cycles
- Understanding of “parasitic”
- Knowledge of the basic needs of animals and how they live in environments
- Understanding of the features of a scientific article, including labelled diagrams and photographs.

Possible supporting strategies

Use this article in the context of a health topic, ideally coinciding with nit season at school. Stress that ANYONE can get head lice!

Activate students’ knowledge of animal survival and how animals are suited to their habitats. Use DVDs, books, articles, and websites to provide exposure to a wide range of different kinds of animals and the challenges they face. Ask students what animals might use humans as a habitat and why.

Have the students review what they know about insect life cycles, and ask them which parts of the life cycle they are most familiar with.

TEXT FEATURES AND STRUCTURE:

- Scientific article
- Enlarged photographs and labelled diagrams
- Intriguing, humorous headings
- The life cycle diagram
- “Lousy Facts” presented in the text
- The use of personification to demonstrate that head lice are parasites
- Some repetition of structure when new information is introduced
- Use of parentheses to show comparisons or to make comments.

Possible supporting strategies

Support the students to identify the structure, writing the headings on a chart. Discuss the headings and the connotations of each one. What does each heading imply? How will it relate to head lice? For students who are likely to find the text challenging, explore the content orally before reading. One strategy for doing this is to:

- give pairs of students the title and headings, and some of the photos and diagrams
- ask them to make predictions about the content under each heading
- have all pairs share and discuss their ideas, recording key concepts and vocabulary
- compare and discuss their ideas during and after reading.

Students may need support to understand the use of personification. Explain that insects probably don’t think about “fair deals” or living “rent free”. These are ways the author helps us to understand that lice are parasites: they don’t do anything helpful for their hosts.

Support the students to identify the parts of the louse life cycle, using the diagram as well as the photographs. Support the students to make links between the written description of the life cycle, which is not in sequence, and the diagram.

Instructional focus – Reading

Science (Living World, Level 2 – Ecology: Recognise that living things are suited to their particular habitat.)

English (Level 2 – Ideas: Show some understanding of ideas within, across, and beyond texts.)

Text excerpts from “Nasty Nits”

It’s hard to think of anything good to say about head lice. They live on us – rent free – and what do we get? An itchy head and tired fingers from too much scratching. It’s not really a fair deal.

This is because head lice only feed on one kind of blood: human blood.

They have no wings.

These legs are short and stumpy, so they’re ... lice can only move from one person’s head to another when two people are very close together.

Claws and thumbs ... down hair.

Like fleas, lice have special mouthparts that help them to drink blood ... because it stops blood from clotting, but its bad news for us.

Another special part of a head louse is its ... don’t drown when you swim or wash your hair.

Most people talk about “having nits”, ... only the egg of a louse.

The eggs are stuck in place with ... of glue. (This glue is another reason lice are so hard to beat.)

Lousy Fact

One thing that hasn’t changed much over ... found buried in the tombs of Egyptian mummies.

Students (what they might do)

*The students use their knowledge of sentence structure to understand the negative structure and their knowledge of humour to recognise the “rent free” joke. They **make connections** between the text and their own experiences of head lice to **visualise** the feeling of having lice and **ask questions** about the reasons why we have them.*

*The students bring together information to **infer** that lice have to stay in one place (the head) because they can’t travel around to find the human blood they need.*

*They **make connections** between the text and their experiences of catching or avoiding head lice to **infer** that head-to-head contact allows lice to climb from one hair to another.*

*The students **ask questions** about how lice survive and search for answers as they read. They **infer** that lice have developed features that help them feed and survive on human heads.*

*The students use the context and their prior knowledge of bleeding to work out what “clotting” means. They **infer** that if the blood clotted, it would be too difficult for the louse to drink it.*

*The students **make connections** with their own experiences and **evaluate information** to **infer** that a nit comb is one way to remove nits. They **infer** that the comb has very fine teeth, which are so close together that the egg is pulled off as the hair is combed.*

*They **visualise** ancient Egyptians using a nit comb to understand how lice have plagued humans for a long time.*

Teacher (possible deliberate acts of teaching)

PROMPT the students to think about the meaning of the first sentence.

- What is “hard”? Why is it hard? What’s another way of saying this? (For example, “There is nothing good to say about head lice”.)

EXPLAIN the use of a concept circle. Draw a circle with four quadrants. Write “Head lice” in the middle.

- We can use this to integrate what we know and what we read about head lice.
- Let’s start with what we know. I’ll label the first quadrant, “What do head lice do to us?”
- What can you tell us about having head lice? What words describe what having head lice feels like?

Write these words in the labelled quadrant.

EXPLAIN that we often have to search for information in different parts of a text to answer our questions.

MODEL asking questions and searching for answers.

- I’m wondering why lice live on human heads. I’ll label another quadrant on the concept circle: “Why do head lice live on us?”
- I’ll reread page 25 to look for answers. I can see they need our blood, so I’ll write that on my chart.
- What are some other reasons lice live on our heads? What can we add?
- See if you can add more information to this quadrant as we read.

ASK QUESTIONS about how lice survive. If you’re using the concept circle, label another quadrant “How are lice suited to their habitat?”

- What special features help lice survive on our heads?
- What does their saliva do?
- What would happen if they didn’t use saliva?
- Why can’t we wash them off when we swim or shower?

PROMPT the students to think about why people have used nit combs for hundreds of years.

- How does a nit comb work?
- Why hasn’t it helped get rid of head lice altogether? What information in the text helped you work that out?
- What have you learnt about why lice live on human heads?

GIVE FEEDBACK

- You’ve looked at the school’s posters and leaflets about head lice to make connections with information in this text. Using different sources of information is a great way of making connections to deepen your knowledge.
- You’ve brought together several pieces of information to understand why our heads are the ideal habitat for lice.

METACOGNITION

- Which parts of the article were difficult to understand. What made it difficult? What did you do to help yourself understand it?
- Show me where you made an inference. Tell me how you did it.
- Show me where you connected information from photos or diagrams to support your understanding? How did this help?

Reading standard: by the end of year 4

The Literacy Learning Progressions

Assessment Resource Banks

Instructional focus – Writing

Science (Level 2 – Living World: Ecology: Recognise that living things are suited to their particular habitat.)

English (Level 2 – Ideas: Select, form, and express ideas on a range of topics.)

Text excerpts from
“Nasty Nits”

Examples of text
characteristics

Teacher
(possible deliberate acts of teaching)

It’s not really a fair deal. But head lice are parasites, and parasites live off other creatures and give nothing in return. This means head lice never play fair.

PERSONIFICATION

Giving animals human feelings and thoughts is one way of helping readers to understand an animal. It can also add humour.

Secret Weapons and Special Bits

Sadly, lice do have a secret weapon: claws. These are found at the bottom of each leg, along with a “thumb”. Claws and thumbs help lice to hang on and to climb up and down hair. They’re also one of the reasons why it’s so hard to get rid of head lice.

HEADINGS

Amusing or unusual headings make readers want to keep reading to find out more.

DESCRIPTIVE DETAILS

Details describe what a feature looks like and explain how a feature works. They may also describe a cause or effect.

LIFE CYCLE DIAGRAM

Living things have a life cycle that can be shown in a diagram. Adding labels to each part of the cycle gives readers additional information, for example, about the survival needs at each stage.

METACOGNITION

- How did you decide which ideas to write about? What criteria did you use?
- How did using a text as a model help you? What problems did you face when deciding how to make your writing different?
- Presenting an idea in a different format can help the audience understand the idea. How else could you present your ideas? How effective would they be?

ASK QUESTIONS to help the students form their writing intentions.

- What ideas has this text given you?
- What kind of writing will you do, for example, an article about a similar creature, a play or a story about head lice, or a poster about head lice?
- Why have you chosen this topic and form – what’s your purpose?
- Who are you writing for? Will your idea interest your audience?
- Have you planned all the ideas? How will you decide which ideas you’ll include and which ideas you’ll drop?

EXPLAIN the use of personification.

- Have you read stories where the animals talk or behave as if they were human? This is called personification. Often it helps us understand an animal’s behaviour.
- In this extract, the author uses a human way of thinking (“playing fair”). What idea is the author conveying? When you are writing about another animal, are there ways you could use personification, for example, by imagining its thoughts?

ASK the students to share their writing with a partner.

- As you read each other’s work, look for one feature that could be made more interesting with some description.
- Talk about these features: what kind of detail can be added?
- How would the details add interest?
- What details would help readers understand the feature? Now work on your own writing, experimenting with your details.

English language learners may benefit from exploring one or two types of sentences to express these kinds of details. To do this, provide a model sentence, explain the structure, write the model into a writing frame (see the example below), model how to use the frame, co-construct more examples with the students, have the students practise with prompts you have provided, support the students to use the frame for their own writing, and provide feedback on their sentences.

“Claws and thumbs help lice to hang on and to climb up and down hair.”

| Feature/s | “help” | Creature | “to” | Action |
|------------------|--------|----------|------|-------------------------------------|
| Claws and thumbs | help | lice | to | Hang on and climb up and down hair. |
| Their long tails | help | monkeys | to | climb. |
| | help | | to | |



(Note that you could delete “to” if it makes the model and the frame simpler.)

PROMPT the students to consider the ideas they want to convey.

- What kinds of illustrations, diagrams, maps, or photos could help your readers to understand your ideas?
- Look through the features in this and other texts. Are there some that you could adapt and use in your writing?
- What information do you need to add to make the meaning clear?
- Check with a buddy: is the feature you’ve used helpful? If not, how can you improve it?

GIVE FEEDBACK

- You chose to write a play about head lice, using head lice as characters. That’s a great way to give your audience some important information about lice.

 **Writing standard: by the end of year 4**
 **The Literacy Learning Progressions**