



**User Conference: Community & Diversity**  
Cockle Bay, Sydney - Friday 17th May, 2019

# INFORMATION LITERACY AND YOUNG LEARNERS

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# AUSTRALIAN PROFESSIONAL TEACHER STANDARDS

## Professional Knowledge

**2.1.2** Apply knowledge of the content and teaching strategies of the teaching area to develop engaging teaching activities.

**2.2.2** Organise content into coherent, well-sequenced learning and teaching programs.

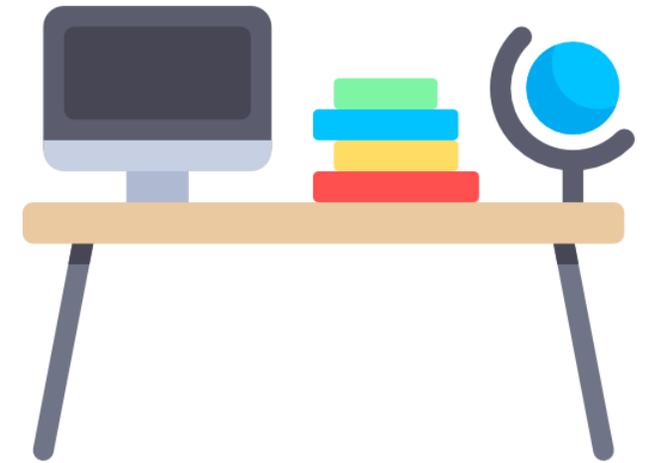
**2.6.2** Use effective teaching strategies to integrate ICT into learning and teaching programs to make selected content relevant and meaningful.

## Professional Practice

**3.2.2** Plan and implement well-structured learning and teaching programs or lesson sequences that engage students and promote learning.

# PART 1 INTRODUCTION

- What is information literacy?
- What is digital literacy?
- Why focus on young learners?

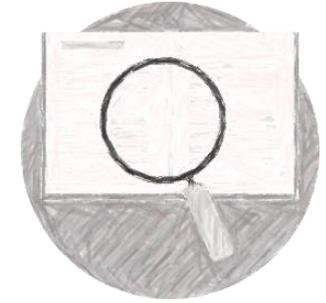


# INFORMATION LITERACY

Information literacy is broadly defined as the capability to identify a need for information, skills to locate and access information, an approach to evaluate information, and the ability to process, organise and use information productively and ethically.



# INFORMATION LITERACY IN THE SCHOOL ENVIRONMENT



Information literacy skills are applied to teaching and learning tasks as a way to instruct and assist students in their learning.

Otherwise stated, information literacy skills are the steps a student administers as they locate and use information.

# DIGITAL LITERACY



“Digital literacy is the knowledge and ability to use technology critically and creatively to find information, solve problems or complete tasks.”

(Australian Government Department of Education and Training, 2017)

Digital literacy also incorporates digital citizenship and the need to act safely and respectfully online.

# INFORMATION LITERACY & YOUNG LEARNERS

From a young age children are expected to attain essential skills required to effectively seek and use information from a wide variety of sources, including frequently from sources based on the Internet.



Gossen & Nurnberger (2013), outline complexity of information seeking and use for children is strongly connected to cognitive, emotional and linguistic development, as well as fine motor abilities.

# YOUNG LEARNERS COGNITIVE DEVELOPMENT

Key characteristics of children aged 6-8 years old

- Initial ability to complete mental operations
- Elementary stage of classifying and organising objects
- Early stages of using logic to solve problems
- Developing confidence in reading and writing capabilities



# YOUNG LEARNERS INFORMATION PROCESSING

- As explained by Nasset (2005), information processing in children requires a considerable use of their working memory
- Consideration of a young child's information processing is essential in planning learning tasks, as they lack processes required to “collect, analyse, synthesise, and present information” from various sources (Kuhlthau, 1998)
- Kuhlthau (2003), suggests “guiding students in thinking and reflecting in the process of information seeking and use” assists students to make sense of information and apply it to the requirements of a learning task.

(Kuhlthau 1998 and 2003 as cited in Nasset, 2005)

# EARLY INTERVENTION



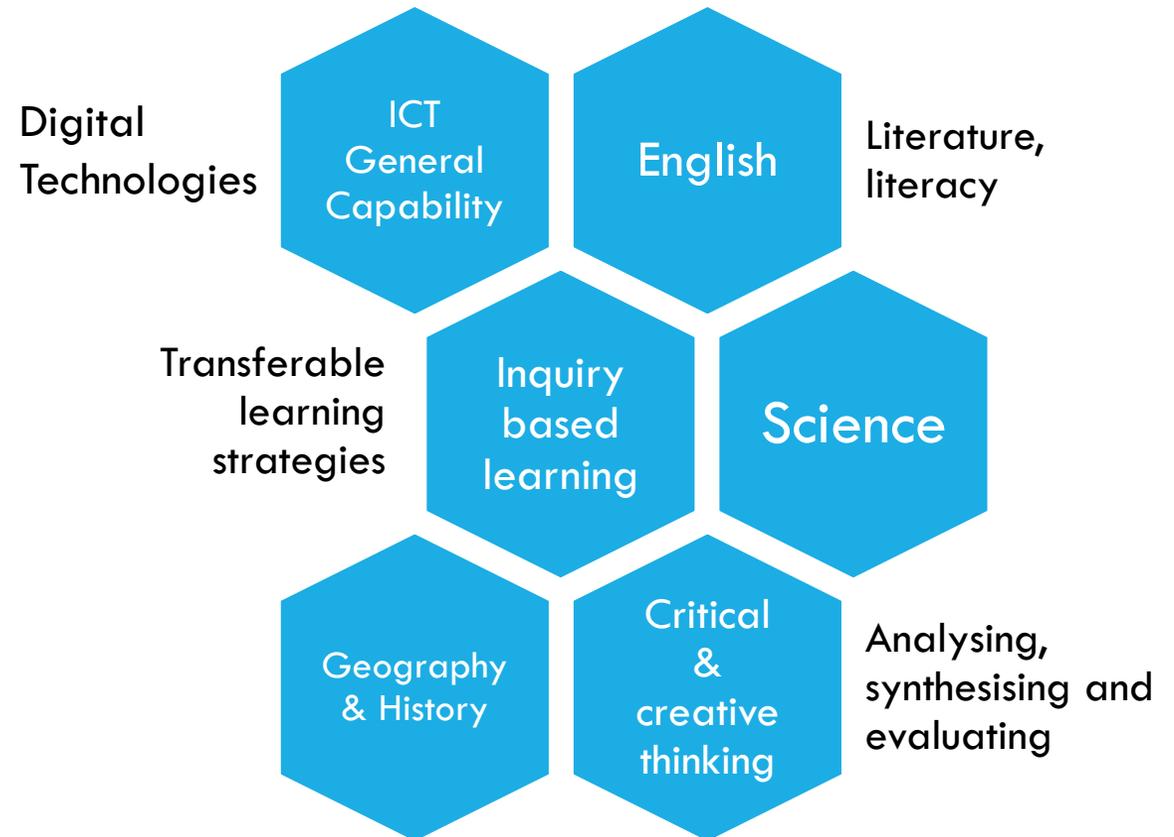
Guiding young learners with information literacy skills by using key terms such as information sources, building background knowledge, and demonstrating the stages of a research task provide young learners with the “building blocks of becoming information literate” (DeCarlo et al., 2018, p. 274) and form the basis of practical early research habits.

## PART 2 TEACHING & LEARNING OPPORTUNITIES

- Where does information and digital literacy fit in the Australian Curriculum?
- How using a framework can assist with explicit teaching.
- Learning sequences and samples.

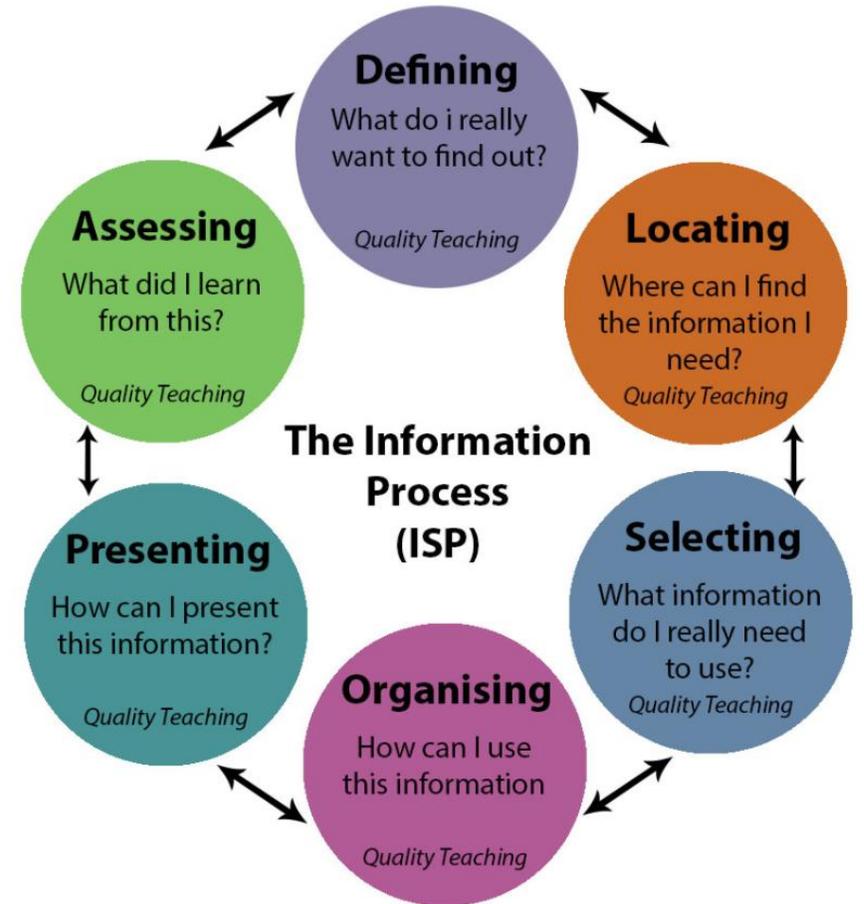
# INFORMATION & DIGITAL LITERACY IN THE AUSTRALIAN CURRICULUM

ALIA and ASLA (2016) acknowledge information literacy skills are “embedded within the Australian Curriculum general capabilities and contextualised in a range of learning areas, providing the framework for teacher librarians to create and manage a program.”



# INFORMATION SEARCH PROCESS FRAMEWORK

The ISP framework provides the backbone for planning and can be incorporated into inquiry frameworks such as **Guided Inquiry Design** (Kuhlthau, Caspari, & Maniotes 2015) or the **Inquiry Cycle** (Murdoch, 2015).



# USING ASPECTS OF THE ISP FRAMEWORK

Constructing learning sequences that are clear, purposeful and provide scaffolds to guide students reduces uncertainty and the heavy load on working memory (Martin, 2013).

Information Literacy Scope and Sequence - Stage 2

Process	Information Literacy Skills
<b>Establish and define</b> <ul style="list-style-type: none"> <li>• What is my purpose?</li> <li>• What do I need to find out?</li> <li>• What are the keywords and ideas in the task?</li> </ul>	<ul style="list-style-type: none"> <li>• Identify and interpret key terms in a task - verbs, text types, ICT</li> <li>• Map the incremental nature of the task</li> <li>• Participate in group brainstorming</li> <li>• Awareness of academic honesty</li> <li>• Formulate a focus question with guidance</li> </ul>
<b>Locate and access</b> <ul style="list-style-type: none"> <li>• Where can I find the information I need?</li> <li>• What do I already know?</li> <li>• What do I need to find out?</li> <li>• What sources will I use?</li> </ul>	<ul style="list-style-type: none"> <li>• Differentiate between fiction and non-fiction</li> <li>• Locate resources via the library Catalogue</li> <li>• Understanding of fiction and nonfiction</li> <li>• Identify and use the anatomy of a book</li> <li>• Navigate online sources – encyclopedia</li> <li>• Basic understanding of primary and secondary sources</li> <li>• Develop a simple search criteria which lists keywords and possible search terms</li> <li>• Uses a search engine</li> <li>• Navigate a webpage</li> <li>• Basic web site evaluation</li> </ul>
<b>Select and process</b> <ul style="list-style-type: none"> <li>• What information do I really need to use?</li> <li>• How relevant is the information I have found?</li> <li>• How credible is the information I have found?</li> <li>• How will I record the information I need?</li> </ul>	<ul style="list-style-type: none"> <li>• Skim pre-selected sources to find keywords, topics of interest, read for detail, stay focused</li> <li>• Assess readability of multimodal sources</li> <li>• Identify information that has links to the task and its usefulness</li> <li>• Identify key points from a variety of sources</li> <li>• Uses headings and dot points when note taking</li> <li>• Create a modified reference with guidance</li> </ul>

# STAGE 1 SCOPE & SEQUENCE

## Year 1

- **Term 1** Main idea in texts, similarities and differences in texts
- **Term 2** Fables, stories from different cultures and Aboriginal Dreaming stories
- **Term 3** CBCA Book Week Shortlist Step inside the character
- **Term 4** **Fiction and Nonfiction investigation**

# YEAR 1 AUSTRALIAN CURRICULUM LINK

## **Year 1 English - Language**

Understand concepts about print and screen, including how different types of texts are organised using page numbering, tables of content, headings and titles, navigation buttons, bars and links ACELA1450

- Learning about how books and digital texts are organised including page numbers, table of contents, headings, images with captions and the use of scrolling to access digital texts

## **Year 1 English - Literacy**

Describe some differences between imaginative, informative and persuasive texts ACELY1658

- Comparing and discussing texts identifying some features that distinguish those that 'tell stories' from those that 'give opinions'

# YEAR 1 LINKS TO GENERAL CAPABILITIES

## Literacy

- Comprehending texts through listening, reading and viewing:
  - Interpret and analyse learning area texts.
- Composing texts through speaking, writing and creating element:
  - Compose spoken, written, visual and multimodal learning area texts.

## Critical & creative thinking

- Inquiring – identifying, exploring and organising information and ideas:
  - Identify and clarify information and ideas
  - Organise and process information

# YEAR 1 FICTION & NONFICTION INVESTIGATIONS

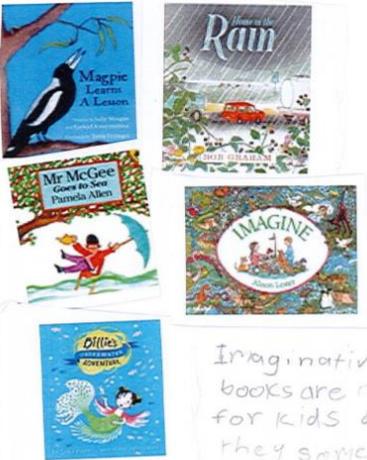
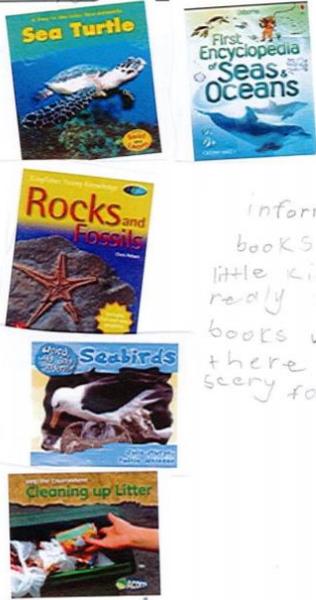
How are books different?

Why are books different?

Small groups were provided a pile of fiction and nonfiction books to sort into two groups.



# YEAR 1 FICTION & NONFICTION INVESTIGATIONS

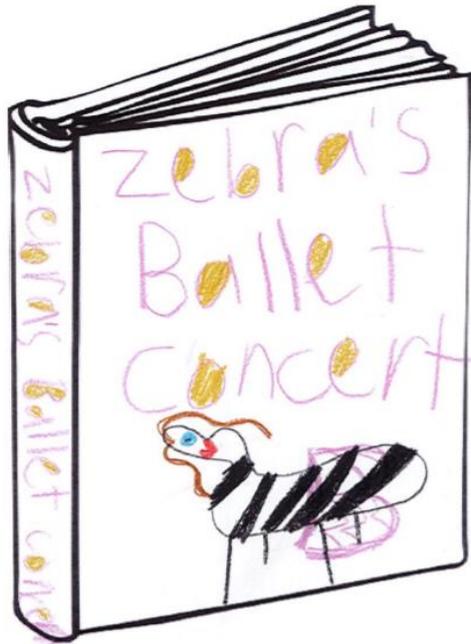
imaginative	informative
 <p data-bbox="435 825 672 1001">Imaginative books are nice for kids and they sometime are funny and somtims sad.</p>	 <p data-bbox="937 634 1225 848">informative books well little kids dont really like informative books because there sometimes scary for kids.</p>

imaginative	informative
<p data-bbox="1370 511 1564 962">chapter book illustrations fiction animals do human things made up characters</p> <p data-bbox="1640 554 1760 848">setting tells a story</p>	<p data-bbox="1854 472 2219 976">facts labelled diagram photos different subjects nonfiction glossary contents page index</p>

Students sorted book covers and words that described features of imaginative or informative books.

# YEAR 1 FICTION & NONFICTION INVESTIGATIONS

The title of my book would be: zebras Ballet Concert

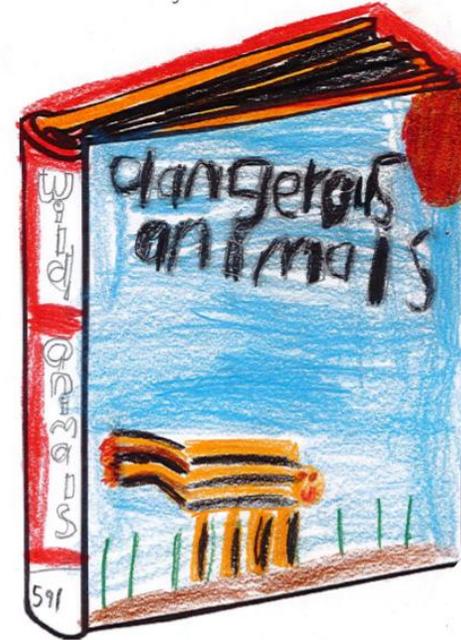


My book would be imaginative

It would have animals doing human things. It would be made up. It will have one character.

My book would be about zebra is doing a ballet concert. So many people will be there.

The title of my book would be: A animals in the wild and dangeres<sup>ous</sup>



My book would be informative

It would have It will have facts about tiger. It will have a contents page and an index.

My book would be about Animals and baby animals. It will also be about insects. It will also be about wild animals.

Students responded by drafting an idea for a new book, they needed to decide if it would be imaginative or informative.

# STAGE 1 SCOPE & SEQUENCE

## Year 2

- Connection to place respond to texts
- **How can we use nonfiction books and the WWW for our research?**
- CBCA Book Week Shortlist picture book elements
- **How does the Internet and World Wide Web assist us?**

# YEAR 2 AUSTRALIAN CURRICULUM LINK

## Year 2 English - Language

Text structure and organisation

Understand that different types of texts have identifiable text structures and language features that help the text serve its purpose ACELA1463

Know some features of text organisation including page and screen layouts, alphabetical order, and different types of diagrams, for example timelines ACELA1466

# YEAR 2 LINKS TO GENERAL CAPABILITIES

## Literacy

- Comprehending texts through listening, reading and viewing:
  - Navigate, read and view learning area texts.
  - Interpret and analyse learning area texts.
- Composing texts through speaking, writing and creating element:
  - Compose spoken, written, visual and multimodal learning area texts.

## ICT

### Investigating with ICT:

- Locate, generate and access data and information

### Managing and operating ICT element:

- Understand ICT systems

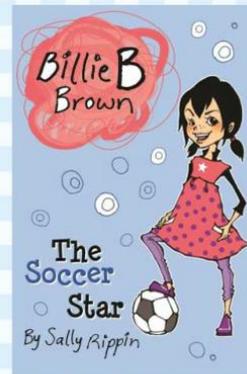
## Critical & creative thinking

- Inquiring – identifying, exploring and organising information and ideas:
  - Identify and clarify information and ideas
  - Organise and process information

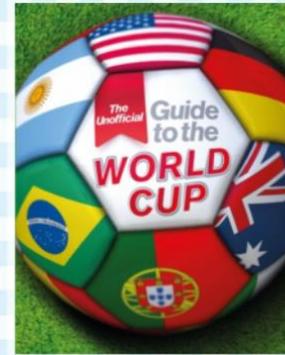
# YEAR 2 REVISION – FICTION & NONFICTION

Whole class revision, matching book labels to books opened discussion about how the library organises books.

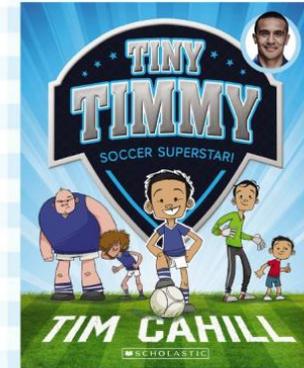
## Sorting Books



F CAH



JF RIP



796.334

# LIBRARY CATALOGUE SEARCH INSTRUCTION

Using 1:1 or 1:2 iPads reveal one search at a time. For example, title search, book series, author and subject search. Ask students to share what they notice about the results.

## 2. Book Series search

Sporty Kids

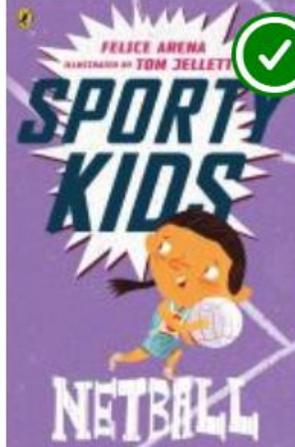
Chook Doolan

# LIBRARY CATALOGUE SEARCH INSTRUCTION

🔍 sporty kids Search

sporty kids in Series

sporty kids : **basketball** in Title

 <p><b>Swimming</b> (2015.) JUNIOR FICTION JF ARE 📖 ☆☆☆☆☆ No reviews</p>	 <p><b>Footy</b> (2015.) JUNIOR FICTION JF ARE 📖 ☆☆☆☆☆ No reviews</p>	 <p><b>Sporty Kids : Cricket</b> Felice Arena ; illustrated ... JUNIOR FICTION JF ARE 📖 ☆☆☆☆☆ No reviews</p>	 <p><b>Netball</b> Felice Arena ; illustrated ... JUNIOR FICTION JF ARE 📖 ☆☆☆☆☆ No reviews</p>
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# LIBRARY CATALOGUE SEARCH INSTRUCTION

🔍 space

Word  Genre  Subject  Title  Author  Series  List

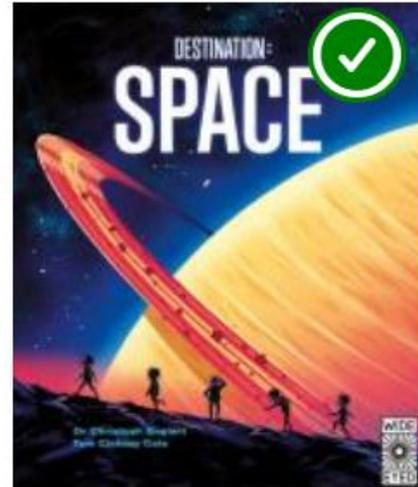


## Space

by Sean Callery and Mira...

NON FICTION

523.1 CAL

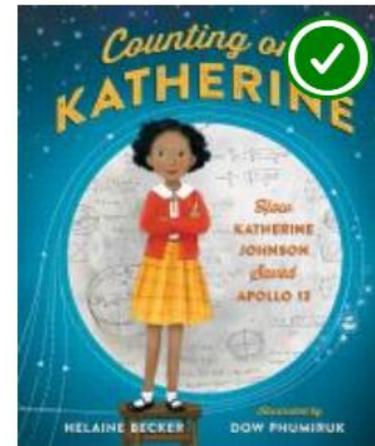


## Destination : space

written by Christoph Engl...

NON FICTION

520 ENG

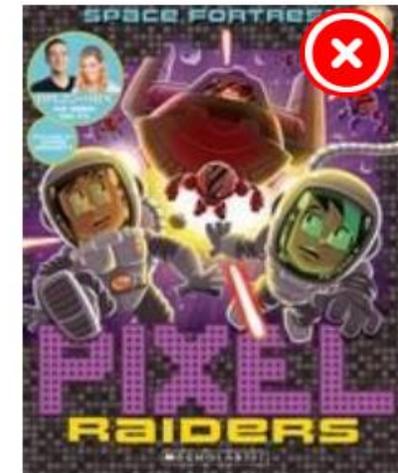
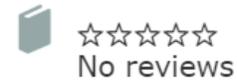


## Counting on Katherine

Helaine Becker ; illustrate...

PICTURE BOOKS

PB JOH



## Space fortress

by Bajo + Hex ; illustrate...

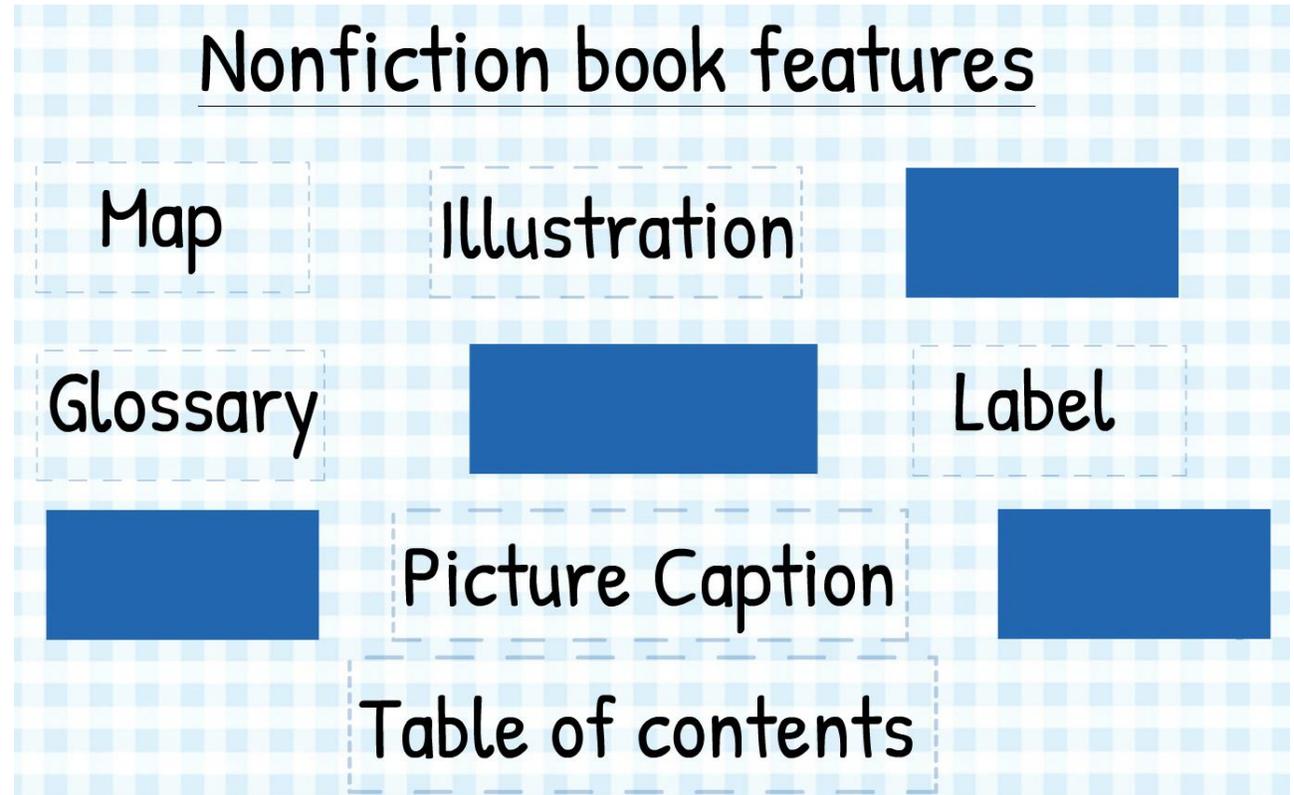
FICTION

F ODO



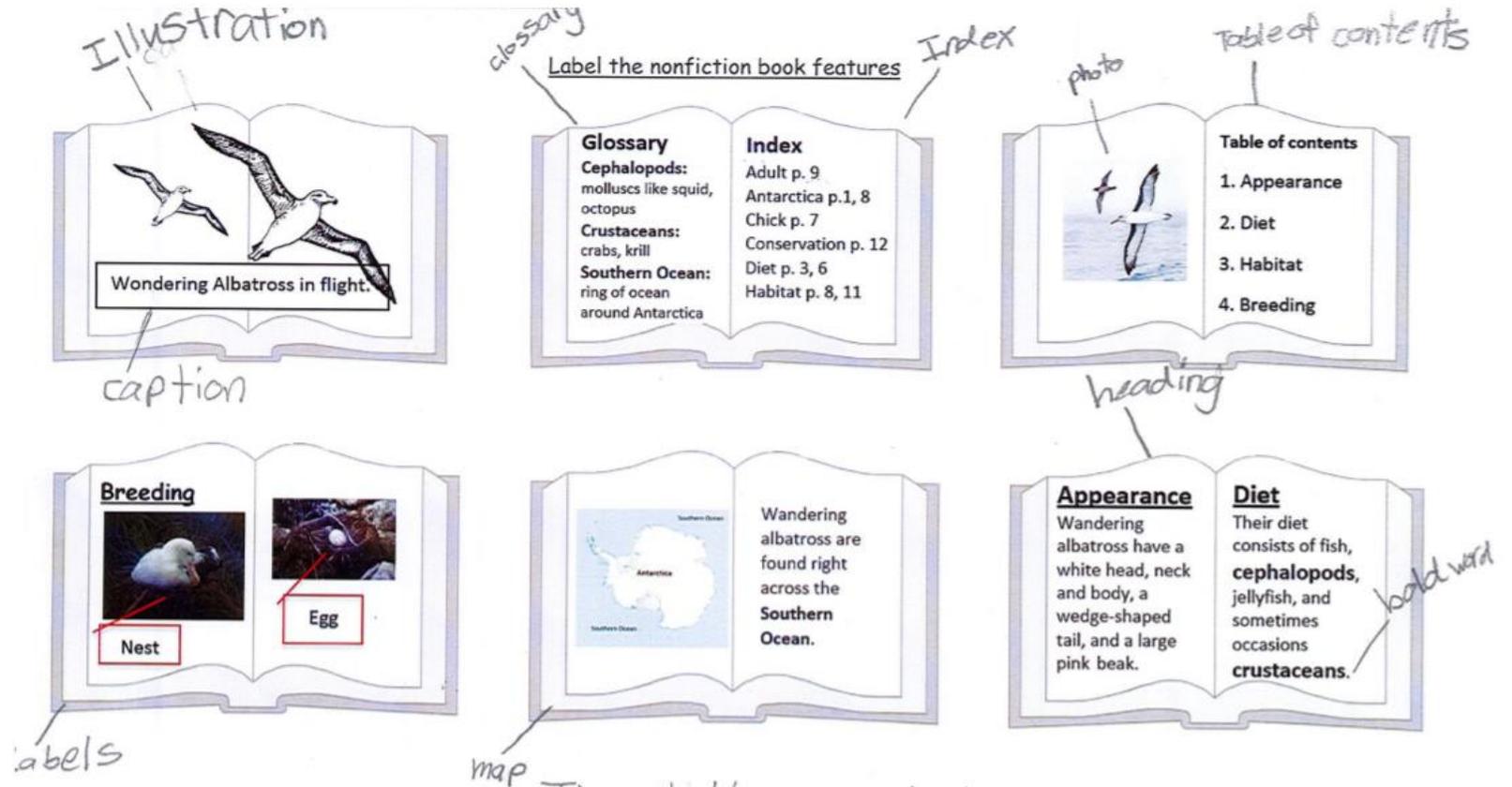
# YEAR 2 NONFICTION BOOK FEATURES

Students provided with a preselected book. One book feature at a time revealed. Students find the feature in their book and discussed how it helps the reader.



# YEAR 2 NONFICTION BOOK FEATURES

Students added labels to a worksheet and explained how one book feature helps the reader.



Choose one feature, explain how it helps the reader: The table of contents tells what topics are in the book. The index tells you what page number the topics are on.

# YEAR 2 INVESTIGATE NONFICTION BOOKS

Students guided through the nonfiction collection. Each student chose a book of interest and located features e.g. contents, index, glossary and index.

Nonfiction Book Hunt

Book Title: Exercise

List three subjects from the Contents page:

The heart	The lungs	Suppleness
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Write an interesting sentence: Marathon running is a very strenuous activity.

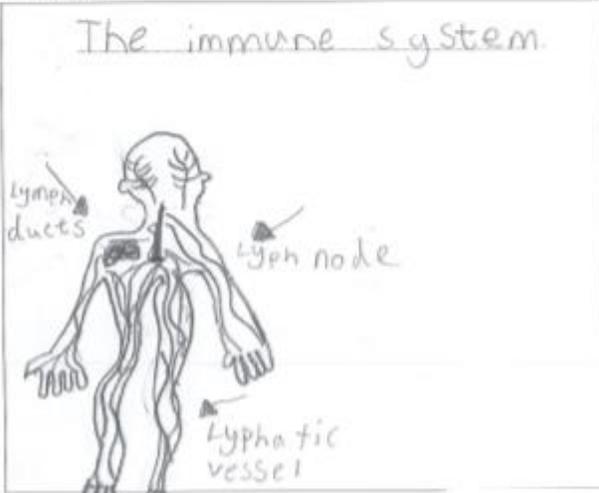
List three words from the index:

blood pressure	calcium	Sleep
----------------	---------	-------

Choose a word from the Glossary – write the word and meaning: joint a place where two bones meet

Draw a picture from the book – include a heading, labels and a caption to explain something about the picture.

The immune system.



lymph ducts

lymph node

lymphatic vessel

Nonfiction Book Hunt

Book Title: my first cat

List three subjects from the Contents page:

choosing a cat	your pet cat	making friends
----------------	--------------	----------------

Write an interesting sentence: stay away from your cat when it looks angry

List three words from the index:

breeders	health	vets
----------	--------	------

Choose a word from the Glossary – write the word and meaning: purr the noise that a cat makes in its throat.

Draw a picture from the book – include a heading, labels and a caption to explain something about the picture.

understanding cats



whiskers

ears

nose

tummy

feet

claws

tail

If your cat feels safe it may lie on its back.

# YEAR 2 WEBPAGE FEATURES

Demonstrate searching World Book Kids for an article. Look through and discuss questions about similarities and differences of nonfiction books and webpages.

## Webpage features



How is a webpage similar to a nonfiction book?

What additional features does a webpage have?

What are the features of a webpage called?

# YEAR 2 PARTS OF A WEBPAGE

Activity designed inspired from BBC Bitesize - What makes a good webpage?  
Students label parts of a selected webpage.



# STAGE 1 SCOPE & SEQUENCE

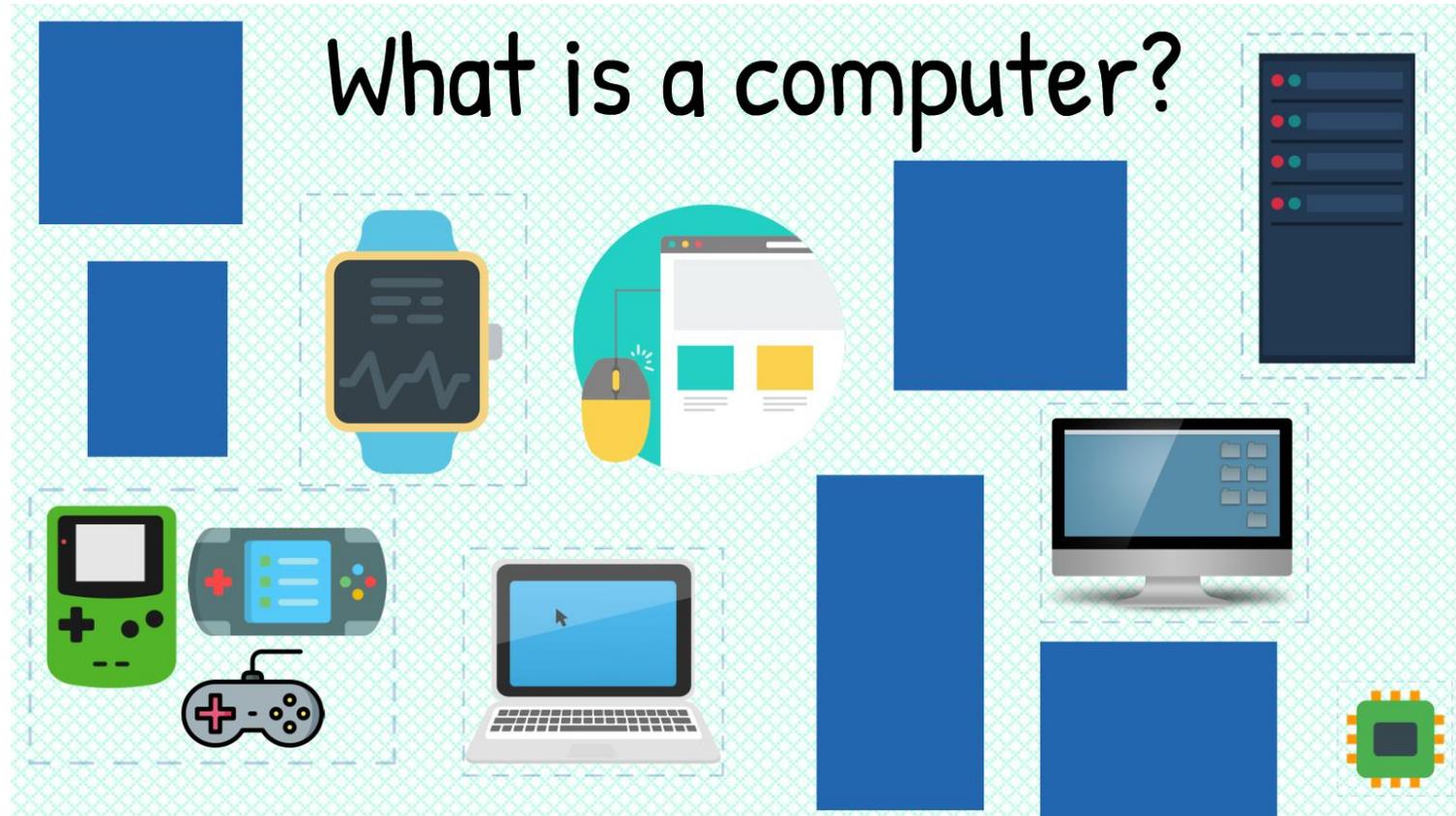
## Year 2

- Connection to place respond to texts
- How can we use nonfiction books and the WWW to be better researchers?
- CBCA Book Week Shortlist picture book elements
- **How does the Internet and World Wide Web assist us?**

# YEAR 2 WHAT IS A COMPUTER?

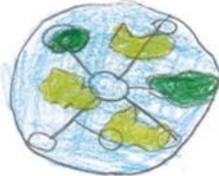
Open discussion by having a student reveal one icon at a time & explain what the image is.

Watched & discussed *What is a computer?*



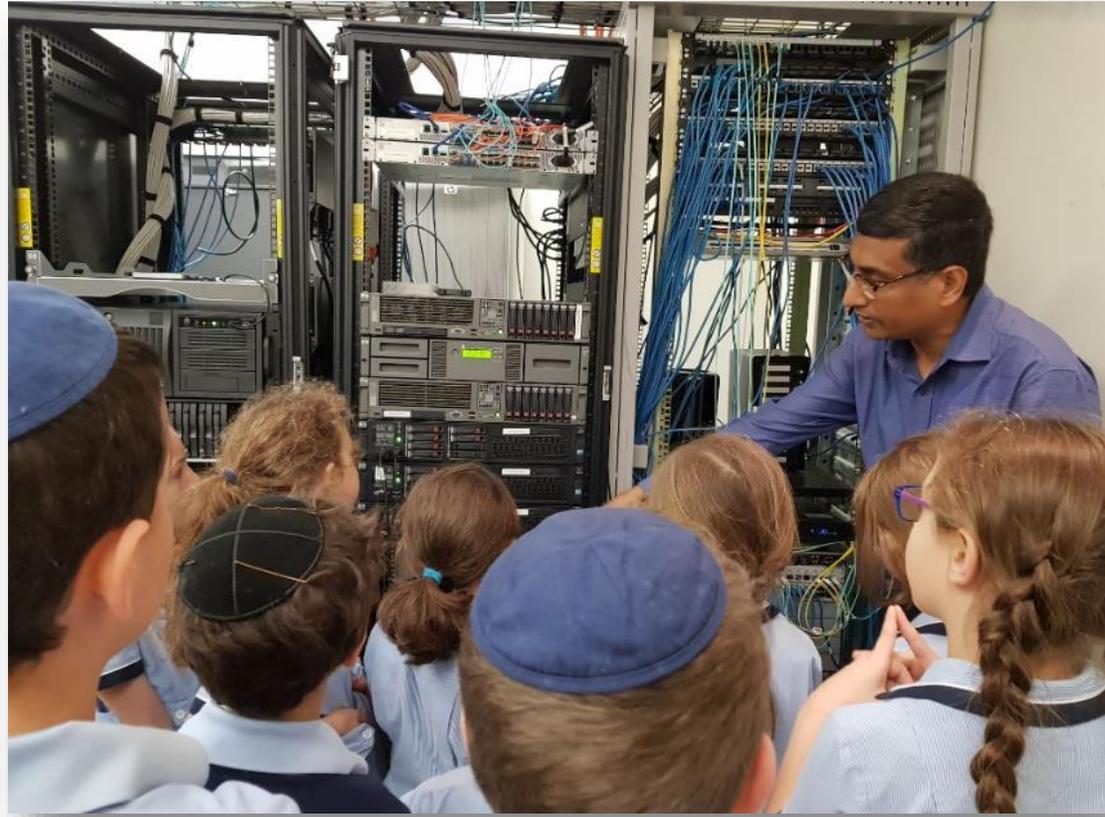
# YEAR 2 THE INTERNET & WWW

BBC Bitesize videos and overview of the Internet and WWW. Students responded to questions to create a class summary. Students visited the BBC site to locate additional information.

I. Internet	World wide web/WWW
<p>The Internet is a network of computers connected to each other. The Internet connects from cables that run underground and under the ocean. Connection can also be wireless. Computers, tablets, games, phones, watches, cameras and cars can connect to the Internet.</p>	<p>The www are the websites and webpages. Browsers are used to access webpages. The www allows you to send emails, search for information, listen to music, watch video films, play games and video call.</p>
	

# YEAR 2 HOW THE INTERNET WORKS INCURSION

A visit to the school's server room - the IT Manager explained how the Internet works and what the different cords are for.



# YEAR 2 WHAT MAKES A COMPUTER A COMPUTER?

Watched *What makes a computer a computer*.  
 Students summarised information for the video.

List 3 words to describe:	
Old Computers	New Computers
1. giant 2. slow 3. no touch screen	1. fast 2. small 3. clever

What makes a computer a computer?	
Input 	<ul style="list-style-type: none"> <li>• tell the computer what you do</li> <li>• command</li> <li>• type onto a keyboard</li> <li>• touch screen</li> <li>• drag a mouse</li> <li>• voice command</li> </ul>
storage 	<ul style="list-style-type: none"> <li>• memory</li> <li>• save information</li> <li>• keep data</li> </ul>
Processing 	<ul style="list-style-type: none"> <li>• uses algorithms - step to change information</li> <li>• solve problems</li> <li>• track data</li> </ul>
Output 	<ul style="list-style-type: none"> <li>• page of text</li> <li>• video</li> <li>• games</li> <li>• song/music</li> <li>• images</li> <li>• virtual reality</li> <li>• robot</li> </ul>

# YEAR 2 HOW SEARCH ENGINES WORK

Summary of information after watching a short video.

Whole class search demonstration and discussion of keywords, results, and URL's.

How do search engines work?

BBC Bitesize

[How search works - Clickview](#)

ranked

index

web crawlers

web pages

links

*How do search engines work?*

*On the World Wide Web search engines allow you to*

*When you search it is best to use key words*

*Search engines use automated programs called \_\_\_\_\_  
\_\_\_\_\_ which follow \_\_\_\_\_ from*

*\_\_\_\_\_ This process makes an \_\_\_\_\_*

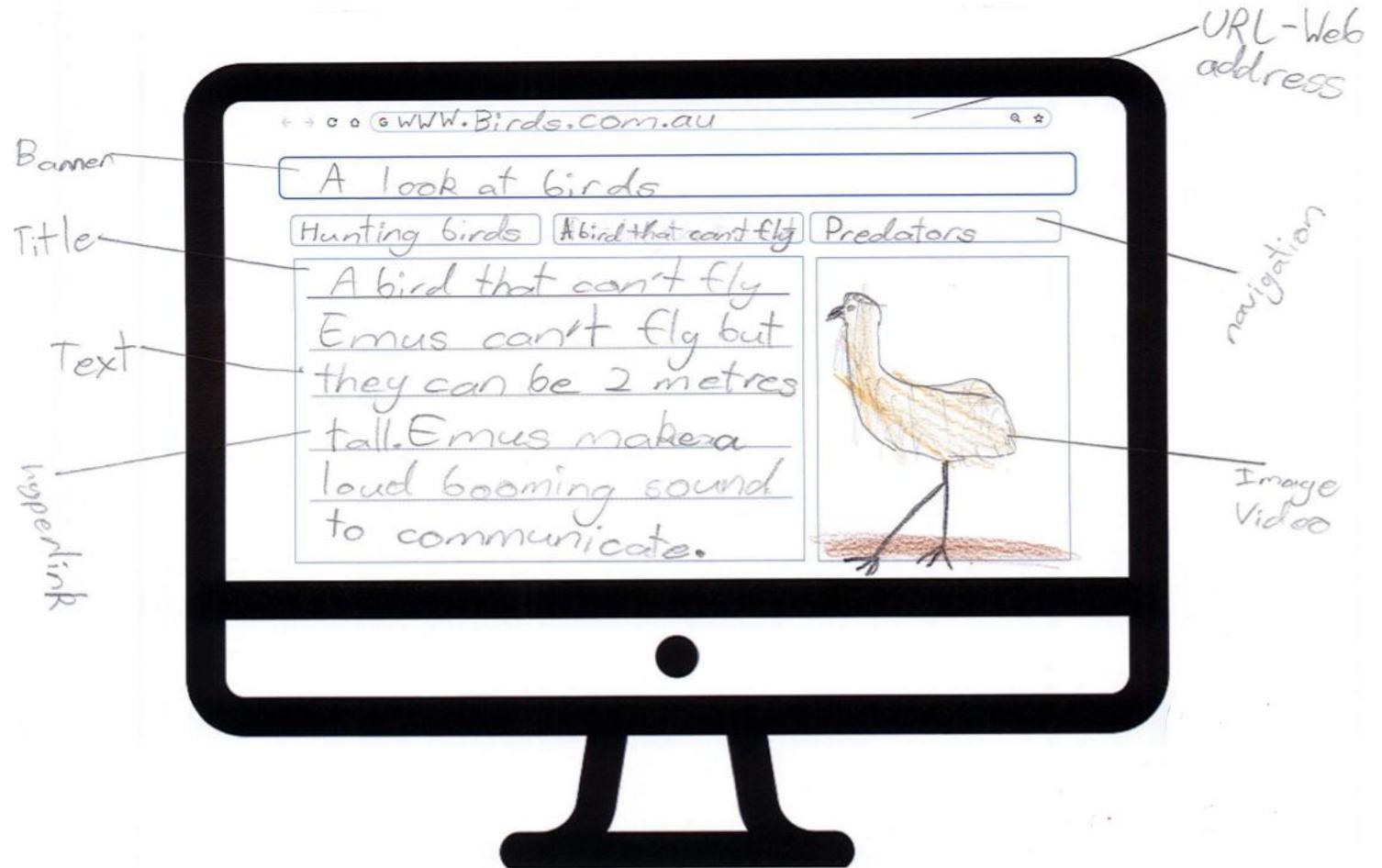
*Search engines sort results by completing algorithms*

*Your search result is \_\_\_\_\_ so the most related  
results are listed first.*

# YEAR 2 PARTS OF A WEBPAGE

Knowledge transfer!

Students selected information from a nonfiction book of their choice to design a simple website template.



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# LEARNING RESOURCES & ACKNOWLEDGEMENT

Work samples showcase examples from students in Years 1 and 2 at Moriah College.

I would like to acknowledge and thank Moriah College for their support and encouragement of this presentation.

A selection of teaching and learning resources related to this presentation can be found at <http://libraryowl.edublogs.org/>

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