Activity 1 – Generating ideas about different kinds of science writing.

How do you learn about science? What have you read or listened to lately that has:
● helped you understand a particular scientific idea
● explained how scientific knowledge is acquired
● discussed the relevance and/or application of scientific understanding to society
● informed you of a scientific event
or
● described someone’s opinion of an aspect of science?

In this activity you will be able to elicit your own ideas and experiences of the role of science writing, compare your ideas to your peers ideas, and look for trends in the examples that come to mind.

Task 1 – Brainstorming examples of science writing
Think about all the different pieces of science writing you have encountered recently and record them here. Think broadly here and include examples encountered both at school and in everyday life.
Task 2 – Sharing ideas
Share your examples with the rest of the class. How similar or different were they? Discuss which examples were the most informative and relevant to your lives, stating why you think they had such an impact – was it the subject matter or the writing style, or a combination of both?

Task 3 – Bringing the thinking together
In the examples listed in Task 1 and discussed in Task 2, identify examples of different text types. For example, how many were reports, reviews or speeches? How many were opinion pieces and how many contained information that was strictly factual? Look for common trends in writing methods or styles.

Record notes and examples of the different text types and approaches to writing here:

Activity 2 – Exploring elements of science writing
What makes for an engaging, informative and persuasive piece of science writing? Which elements of a piece of writing can the writer take creative control of in order to develop a particular style? How can the text type or the topic material influence the style of the writing?

In this activity you will consider different elements of style in 3 different text types provided for you, as well as have the opportunity to explore some examples of engaging and informative science writing of your own choice.

Task 1 – Examining the style elements of a given piece of science writing
a. Before reading the following science article – *Every lizard counts* by Nicole Gill, BAS2016 (NewSouth), *The Monthly* – think about what the title tells us as a reader about the article and how it might prime us before we engage with the text itself. Record your thinking here:

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_____________________________________________________________________________________
_____________________________________________________________________________________
_____________________________________________________________________________________
_____________________________________________________________________________________
_____________________________________________________________________________________
b. Once you have finished reading the article, write a brief review to describe the subject matter, main points communicated, and any methods the author used to engage the reader.

_____________________________________________________________________________________
_____________________________________________________________________________________
_____________________________________________________________________________________
_____________________________________________________________________________________
_____________________________________________________________________________________
_____________________________________________________________________________________
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c. Now go back over the article and see if you can identify any of the following specific style elements. You can highlight them in the text itself as you go and then collate them here in the following table. See the reference notes* on writing style to help guide you.

Table 1 – Writing style analyses

<table>
<thead>
<tr>
<th>Style element</th>
<th>Examples in the text</th>
</tr>
</thead>
<tbody>
<tr>
<td>Word choice</td>
<td></td>
</tr>
<tr>
<td>Sentence structure</td>
<td></td>
</tr>
<tr>
<td>Paragraph structure</td>
<td></td>
</tr>
<tr>
<td>Voice</td>
<td></td>
</tr>
</tbody>
</table>

*Reference notes on writing style
The writing style helps convey meaning in an engaging way and contains several elements worth examining. When reviewing a text, look for the following:
1. Word choice
   a. Do the chosen words provide concise and precise meaning?
   b. Are active verbs used?
   c. Are there creative adjectives?
   d. Is there use of polysyllabic words?

2. Sentence structure
   a. Does the sentence have fluency, that is, does it flow and have rhythm?
   b. Are there examples of sentences of different lengths?
   c. Is the sentence tight, that is, no excessive words?
   d. Is the opening sentence engaging and does it have a hook to draw the reader in?
   e. Are sentences clear and concise?

3. Paragraph structure
   a. Does each paragraph contain a single idea?
   b. Does each sentence link to the next?
   c. Is the first main paragraph strong?
   d. Does the last paragraph conclude the main idea?

4. Voice
   a. Is it a goal of the writing to convey the writer’s personality? If so,
   b. Does the writing effectively convey the writer’s personality?

Task 2 – Considering text type
Research the features of the following three text types and summarize your research by completing the table below. Which text type do you think *Every lizard counts* is an example of? Justify your choice in the right hand column.

Table 2 – Text types

<table>
<thead>
<tr>
<th>Text type</th>
<th>Definition and features</th>
<th>Examples (can include those from Activity 1 as well as your own research)</th>
<th>Examples from the supplied text – with justification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Persuasive</td>
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<tr>
<td>News story</td>
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<tr>
<td>Opinion piece</td>
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</tbody>
</table>
Task 3 – More on text type and writing style
Here are two more science articles for you to examine.

1. *A Once bitten: the tick making a meal of carnivores* by Bianca Nogrady, BAS2016 (NewSouth), BBC Future online
2. *Meat the relatives* by Michael Slezak, BAS2016 (NewSouth), *New Scientist*

a. Do they use the same or different style elements compared to those employed by Nicole Gill in *Every lizard counts*? Discuss the style elements of these two articles with the class, or complete a writing style analysis similar to that carried out in Table 1.
b. Identify which of the remaining text types these two articles belong to and justify your choice by writing your response in Table 2.

Task 4 – Comparing all three text types
Imagine the three articles are finalists for a science writing competition and you are one of the judges that has to help make an informed decision to choose the overall winner.

a. Use the ideas explored here in Activity 2 (about writing style and text type) to write a set of criteria that can be used to compare each piece of writing.
b. Apply the criteria in order to assess each piece of writing. Decide before you start whether you will either rank the 3 articles for each criteria, or give them an absolute score out of a given number – what are the benefits and drawbacks of each method?

<table>
<thead>
<tr>
<th>Criteria for judging</th>
<th>Nicole Gill <em>Every lizard counts</em></th>
<th>Michael Slezak <em>Meat the relatives</em></th>
<th>Bianca Nogrady <em>A tick bite that makes you allergic to red meat</em></th>
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Task 5 – Exploring within your own interests
Find a piece of science writing that engages you due to its interesting subject matter and rich style. Discuss this text in a review that can be posted online or personally shared with others in conversation.

Activity 3 – Analysing your own writing
Have you started writing yet? How are your ideas developing?

Once you have started your own writing you can analyse it for the following:

a. Text type – are you writing an opinion piece, news report or persuasive essay? What features will you use to keep your writing consistent with your chosen text type? Are those features already identifiable in your piece?

b. Style – as you write, think about how you can introduce strong and obvious style elements into your piece to give it an engaging beginning, middle and end. Once you have a draft, use Table 2 from Activity 2 to analyse the presence of the various style elements. Be creative about how you introduce any additional elements. Use any tools you have, such as a thesaurus for finding words that help the flow and fluency of the writing.

c. Voice – does your piece require a voice? If so, how can you achieve this?

d. Research – have you included your summarized research and checked the facts? Don’t forget to keep a bibliography of all references used.

e. Proofing - Check for correct capital letters, punctuation marks and spelling. Have your work proofed by someone else as well as yourself. Keep all drafts of your work in case you need to revise or rework certain previously discarded features.

f. Title – does the title both represent the article as well as engage the reader?

Have fun!