



Discovering Science: Science Writing

What science discoveries will you choose to write about?

If your students are completing the whole of this course online and are not participating in the teacher-led lessons based on it, then they can complete useful and engaging activities based on the content covered. You can choose for your students to complete individual tasks by themselves or encourage group work. Though you may have your own ideas about what your students can do with the course content, we've made things easy for you by suggesting some activities that you can submit to your students below. Instructions for the students can be found later in this document.

Individual student tasks taken from the course

Reflection: Students write a 500 word reflection on what they learned from the course, including anything they might do differently now as a result of their learning and anything additional they found out from their own reading around the topic. They will submit this reflection as a written essay, podcast or video.

Activity: Students complete the exercise from Step 1.6 (A worthy read?), reading the articles and noting their answers to the questions, then write a short reflection answering these questions:

- Which sources of science writing do you trust and why?
- What makes a piece of science writing reliable?

Students submit exercise answers and reflections to the teacher.

Research task: Students watch the video in Step 1.12 (Structuring a narrative) and identify a topic for producing a piece of their own science writing. They should note down the following:

- Who is the audience?
- Why is this topic interesting to them?
- How much (or little) are they likely to know about this already?
- What will be most interesting about this story to the audience?

After answering the questions above, students conduct research on their story and produce a short piece of science writing. Students should consider using multiple sources, and use the 'what/why/where/who/how/when' questions to inform their writing. Information and guidance for Steps 1.13 and 1.14 will be very useful aids.

Group tasks based on the course

Research task: Each group brainstorms as many types and sources of science writing they can think of, then watch the video in Step 1.5 (Types of science writing) and compare their ideas with those in the video. Did they miss any in their lists, and does anything surprise them from the video?

Groups then research the difference between 'primary' and 'secondary' sources, noting down a definition for each (information in Step 1.10 may be useful), then work through their list of types of science writing, assigning each as either a primary or secondary source. Groups can submit their lists to the teacher.

Discussion task: Groups look at the 'inverted pyramid' approach and diagram together, with a short piece of science writing which illustrates this approach. Groups should discuss the story, the approach, and identify how this approach is applied in the writing. Groups should take notes of their key discussion points and submit these to the teacher.

Additional support

You can use the [How to use FutureLearn guide](#) with your students to get them started. There is also a school-facing [Guide to safeguarding and security on FutureLearn](#) if you need it.

Test

You can use the test questions listed in the student instructions below as a short assessment to enable your students to demonstrate what they have learned on the course. The assessment has 15 marks in total.

The questions have been designed to be flexible and open. The questions indicate which steps the answers can be found on. The marks available reflect the likely length and complexity of the answer expected, and how many points they are likely to make. For example, a 5-mark question might reflect a longer, more complex question, or one where they have asked to describe or explain a number of elements. Depending on the level and ability of your students, you can decide how you wish to award the marks so they are appropriate for your class.

Each question suggests which steps the students may wish to return to answer the questions. **You can decide if you want to include this information when you share the assessment with your students.**

Student instructions

Reflection

Write a 500 word reflection of what you have learned from the course. It should include anything you might do differently now because of what you learned and anything additional you found out in your reading around the topic. Submit this reflection to your teacher as a written essay, podcast or video.

Activity

Complete the exercise from Step 1.6 (A worthy read?), reading the articles and noting your answers to the questions, then write a short reflection answering these questions:

- Which sources of science writing do you trust and why?
- What makes a piece of science writing reliable?

Submit your exercise answers and reflections to your teacher.

Research task

Watch the video in Step 1.12 (Structuring a narrative) and identify a topic for producing a piece of your own science writing. First, note down the following:

- Who is the audience?
- Why is this topic interesting to them?
- How much (or little) are they likely to know about this already?
- What will be most interesting about this story to the audience?

After answering the questions above, conduct research on your story and produce a short piece of science writing.

You should use multiple sources, and use the 'what/why/where/who/how/when' questions to inform your writing. Information and guidance for Steps 1.13 and 1.14 will be very useful in producing your piece of science writing.

Group discussion

As a group, look at the 'inverted pyramid' approach and diagram together, as well as a short piece of science writing which will be provided by your teacher. Discuss the inverted pyramid approach and the story together, and identify how this approach is applied in the writing. Take notes of your group's key discussion points, including how the story uses the inverted pyramid approach, and submit these to your teacher.

Group research task

As a group, brainstorm as many types and sources of science writing you can think of, making a list. Then, watch the video in Step 1.5 (Types of science writing) and compare your ideas with those in the video. Did you miss anything from your list, and does anything surprise you in the video? Then, research the difference between 'primary' and 'secondary' sources, noting down a definition for each (information in Step 1.10 may be useful). In your group, work through your list of types of science writing, and assign each one as either a primary or secondary source. Submit your group's list to your teacher.

Test

Complete the assessment questions below to demonstrate your understanding of the course. You can refer back to the course to find the answers or more detail as you need to. You should not however share your answers with other students.

Your answers should be written in full sentences and be appropriately detailed. Make sure you read the questions carefully before starting to answer. Each question shows how many marks are available – use this to guide how much detail or how many points you need to include.

[The questions also indicate where you can start to look to find the answer. You can also include information from other steps if that is relevant.]

1. How can science writing can help to explain a complicated issue? Give examples. (3 marks) [Step 1.4]
2. List three different types of science writing. (3 marks) [Step 1.5]
3. List three different sources of science writing. (3 marks) [Step 1.6]
4. What do you need to know about your audience when preparing science writing? (3 marks) [Step 1.8]
5. What is the 'inverted pyramid' approach to science writing? Name each of the levels of the pyramid. (3 marks) [Step 1.13]