



## Evaluate articles about the universe; Who are we? Where are we? And Are we alone?

Students who understand how their work is assessed are at an advantage. In this activity, students examine assessment criteria, and evaluate three Catalyst articles.

### Outcomes

Students will be able to:

- Apply general marking criteria to a scientific article
- Assess and justify marks awarded

### Resources required

Student handout: Sample assessment criteria

Student worksheet

Computer access to articles or copies can be made, each one is approximately 3 pages long.

### Time required

60 minutes

### Outline of the activity

Students work in groups of 3.

**Part 1** Each group is allocated three copies of the sample assessment criteria (student handout), one copy of the assessment grid (student worksheet) and one copy of each of the 3 articles. Individually they read an article, award marks according to the assessment criteria and make brief notes justifying the mark awarded. They should aim to do this within 10 minutes. They rotate the articles within the group and repeat the evaluations. At the end of this stage each person in the group should have 3 sets of marks with brief notes.

**Part 2** The aim of this part of the activity is for students to agree an overall mark for each article by examining the marks each person

awarded for each of the categories. The justification notes will be valuable at this stage.

The plenary to the activity could be class discussion of final marks awarded by each group for each article plus clarification of any points raised interpreting the assessment criteria.

### Tips and strategies



Evaluation of writing may be 'analytic' or 'holistic'. Holistic evaluation gives a grade based on general impression.

Giving a grade according to predetermined criteria, under a number of main categories (structure, content, language, form) is the basis of analytic evaluation. When summing up an analytic evaluation, the final grade sometimes comes out much lower than expected. In this case, the analytic evaluation may not be sufficient and needs to be supplemented by holistic evaluation.

It is valuable to engage students in evaluation in different learning situations. The level of participation can increase as students get more experience. Initially, the teacher provides the criteria and the class can use them to analyse texts written by students from the class or from elsewhere. Later, students can try to build their own list of criteria.



## Evaluate articles about the universe; Who are we? Where are we? And Are we alone?: briefing sheet

### Part 1

Spend up to 10 minutes reading the sample assessment criteria (student handout) and discuss as a group. Evaluate 3 articles and award marks according to the set criteria. Assume the total marks to be 100 and note the weighting of each category. Make brief notes justifying your marks. You will have 10 minutes to read and assess each article.

### Part 2

Allow up to 20 minutes to complete this part of the activity. Each person in the group will have 3 sets of marks and brief notes. Collectively you have to agree on a final mark for each article. You will need to go through each category of each article. Where marks differ, discuss this using your notes to arrive at an agreed mark for all categories and final marks for each of the 3 articles.

Category	Weight	Article 1 (mark & notes)	Article 2 (mark & notes)	Article 3 (mark & notes)
Structure	10%			
Formatting	10%			
Language	15%			
Illustrations	15%			
Abstract	5%			
Scientific content	30%			
Conclusion	5%			
Bibliography	5%			
Individuality	5%			

Total \_\_\_\_\_ %

Total \_\_\_\_\_ %

Total \_\_\_\_\_ %