**Reformed GCSE and A level subject content consultation**

Is the revised AS and A level content in each of these subjects appropriate?

Please consider:

whether the content reflects what students need to know in order to progress to undergraduate study

**Environmental Science**

The Royal Society of Biology welcomes a focus on the need to ‘develop competence and confidence in a variety of practical, mathematical and problem-solving skills related to environmental issues and sustainable use of resources’ (in section 2), and the requirements for students to ‘undertake experimental and investigative activities, including appropriate risk management, in a range of environmental contexts’ (in section 9), and to develop the ability to ‘apply investigative approaches and methods to practical work (in Appendix 1). This content positions environmental science alongside biology, chemistry and physics in terms of being a practical subject for which practical skills will be needed in order to progress to further study and careers in the subject.

However, environmental science students are merely required to ‘know how’ to safely and correctly use a range of practical equipment, materials and techniques indicating that they will not be assessed on their actual ability to use those skills. This reduces the status of environmental science as a practical subject compared to the other sciences. The environmental science content does not list the equipment that schools and colleges will need to provide for their students, and the skills that students should be able to demonstrate, meaning that specifications across Exam Boards could vary significantly on this vital aspect of the qualification.

Biology chemistry and physics A levels have direct assessment of student’s skills through the practical endorsement, alongside the indirect assessment of practical understanding and skills through exam questions. The lack of direct assessment implies that the “Environmental sciences” qualification does not put the same value on practical work as other science subjects. It is essential that the practical element is recognised as a vital part of all science qualifications and without direct assessment the practical elements may be devalued.

The proposed 100% written exam assessment would not enable universities to identify those students who were practically skilled in A level Environmental Science, which has clearly been prioritised in the content drafted by the Department for Education. We would encourage the Department of Education to reconsider the assessment of the Environmental Sciences qualification to include direct assessment of practical skills.