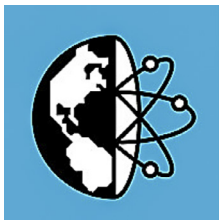
Science websearch

- Websites are checked as close to printing as possible – however, website addresses do change.
- Inclusion of a website does not imply that ASE endorses the content of the site.
- Sites are suggested on the basis of 'take a look, you might find something interesting and useful' – we have not read every page on every website listed.
- Some sites may involve subscriptions and/or payment for download of material.

Please send details of any websites you have found or produced to the *Science websearch* editor, David Moore, at ssreditor@ase.org.uk. We would also be interested in hearing about how you have used websites that have appeared in *Science websearch* in your educational setting.

In this issue we are looking at websites that cover science from a wide range of other sources, sometimes rewriting the material so that it follows their own house rules. As such, none of the sites are specifically designed for use in schools. However, they are a good source of background material as well as giving an insight into the latest science as it occurs.



www.wired.com/category/science

The *Wired* website gives free access to a number of articles from *Wired* magazine. However, to increase the amount of material available a subscription can be taken out, which also includes a hard copy of the magazine. Although this is predominantly an American website, there is enough here to warrant further investigation. A thorough perusal of the site would be in order before deciding whether it would be worth taking further and obtaining a subscription.

www.sciencealert.com

ScienceAlert is a website that publishes science fact-checked news online. It is independently run and backed by strict editorial policies. The articles are fully accessible and complex topics are broken down for ease of understanding. Articles are classified under the following headings: *Tech, Health, Space, Environment, Humans, Physics, Nature, Politics & Society, Comment & Opinion*, and *Explainers*. Any of these could be of interest in a classroom situation, possibly as an introduction to a lesson or as a means of elucidating classroom discussion. Effective use of the search button yields a plentiful supply of results if a specific topic is required. This site is highly recommended.

www.popsci.com

The *Popular Science* website files its contributions under the following topics: *Science, Technology, DIY, Reviews, Health, Animals, Space, Environment, Gadgets* and *Goods*. As its name implies, this site deals with all aspects of popular science (from the American standpoint); however, the content does not shy away from complex explanations where necessary. The search button also allows articles from quite a long time in the past to be accessed, thereby making available more in-depth background material when required.

www.nytimes.com/section/science

The science pages of the *New York Times* may be of interest when considering background material for classwork. Although the home page is accessible and the latest articles are listed, there is no access to the articles themselves unless an account is obtained. A free account will give access to the content of a limited number of articles and personalised email briefings, whereas a weekly subscription gives full access. At the time of writing the subscription stands at £2 a week. Articles are written in clear language that will be accessible by all at GCSE or A-level, and cover most world topics currently in the news.

https://timesofindia.indiatimes.com/home/science

Science News from the *Times of India* allows free access to the vast majority of its articles without logging in or other registration. Although articles are seen from an Indian standpoint, they still remain relevant as they are reported from all over the world. Occasionally there is some degree of advertising but it is not intrusive. Articles are generally relatively short and could be used a basis for class discussion or a source of background material. All pages allow for comments to be made by the general public – as ever one ought to be aware that not all of the material submitted may prove to be exact science and so may need specific consideration before being used in a classroom situation.

www.forbes.com/science

Science articles from *Forbes* offer a wide-ranging look at probably the more popular forms of science. However, they are heavily interwoven with advertising, which may sometimes not be obvious as the article is being read. Articles can vary in length and so could be used as 'punctuation marks' in lessons to reinforce a topic that has just been covered, or as an introduction to a topic. The search button may help to look for particular topics; however, be aware that this will also result in a lot of advertising material to trawl through. This is a good site to start browsing and see where it gets you; there is lots of interesting material if you don't want to go too deeply into a topic.

www.abc.net.au/news/science

From the ABC News channel in Australia comes this selection of articles and webpages. The site is divided up further into *Space, Tech, Environment* and *Human History.* Articles are largely, but not always, based on Australia, but can also give another view on each of the topics. Occasionally there are links to experiments that can be tried at home, but, as usual, appropriate risk assessments need to be made before setting any of them for pupils to work on. This is a site that is worth exploring for its views on current topics as seen from the Southern Hemisphere.

https://blogs.ei.columbia.edu

This series of blogs entitled *State of the Planet* comes from Columbia Climate School, part of Columbia University in the city of New York. The site is divided into the following sections: *Agriculture, Climate, Earth Sciences, Ecology, Energy, Health, Sustainability, Urbanization* and *Water*. Clicking on any of the topics leads to informative and educational articles. These are often accompanied by relevant pictures, illustrations and, where necessary, animations and videos. Material presented is clearly explained and is suitable for use at all school levels. There is also a link to *Glacier Hub*, which covers research and activities in mountain communities throughout the world. The EI site is well worth exploring for information to enhance lessons, or to provide project and poster material.

www.livescience.com

Live Science looks at current science news and images on the internet as well as looking at current research and discoveries. All articles are freely available and are presented in a user-friendly, easily accessible manner. This is a good site to go back to if you want to learn something new every day; it is good for dipping in and out of to see what you can find of interest. There are also 'videos of interest' punctuating the articles, which may not be totally related to the topic under consideration and may lead you on to another train of thought entirely. The search function is good and allows an easy way to search for specific topics, particularly if one is not just 'browsing'.

www.sciencedaily.com

ScienceDaily features the latest news and discoveries covering the medical sciences and health, physical sciences and technology, biological sciences and the environment, and social sciences, business and education. Material is updated daily and is obtained from sources worldwide. Material on the

site would be eminently suitable for those at A-level or equivalent standard. There are links on each page to the source of the original material as well as further links to related material, so there is plenty of scope for expanding the search parameters. The search button also provides a large number or related results, especially after one has scrolled past the obligatory advertisements. As this site is highly up-to date it might be a good one to use as a source of material for introductory class discussions, and so on.

www.realclearscience.com

RealClearScience is a portal to scientific articles from around the globe. Articles can vary between those that are just interesting to some that cover the latest scientific discoveries. Material seems to be sourced directly from a number of other websites so some redirection may occur on looking at the various pages on this site. This results in pages that vary between the very small to the extremely long, and from some quite simple illustrations to the very complex. The site has a high degree of advertising material so it would be prudent to view any relevant pages before releasing it with due care to pupils.

https://phys.org/chemistry-news

PhysOrg is the host for a number of scientific websites, all of which can be accessed from the home page. Topics can be further sorted into *Nanotechnology, Physics, Earth, Astronomy and Space, Technology, Chemistry, Biology* and *Other Sciences*. Articles are generally reports from scientific journals and institutions, which have been reworded appropriately. As the articles are usually based on research and announcements, they may not all be suitable for use in schools; however, there is much here that will be of use, particularly if you wish to keep up with the most up-to-date science reporting. The search facility is excellent and will allow for in-depth sourcing of material where required.

www.sciencenewsforstudents.org

ScienceNewsforStudents is dedicated to providing age-appropriate science news to learners, parents and their teachers. Although it is based in the US, much of the material would be of wide interest in any normal classroom situation. Within each article there are links to other pages where needed, and at the end of each article there is a glossary (called *Power Words*) designed to aid STEM literacy and to allow pupils of any age group to access the articles. *Power Words* enable pupils to understand words that they may not have come across before. There is a section on *Experiments* (accessible from the menu), but these will need to be risk assessed before recommending pupils to undertake them. There is also a related site designed for those more advanced in science at www.sciencenews.org.

https://scitechdaily.com

SciTechDaily sources a wide range of material from writers and research institutions in order to bring the latest science and technology together in one place. Articles come with suitable pictures and illustrations and are completed with links to further sources of information. Material would generally be of most benefit for those in years 11 and above. As with the majority of sites reviewed, the search facility is excellent. This site is also free of advertising material, meaning that it can be safely left for pupils to explore further on their own. As its name suggests, material is updated daily and so is at the forefront of science news.

www.universetoday.com

Universe Today is a website devoted to bringing the latest space and astronomy news to the public. Material on the site is gleaned from scientific articles and university research. Articles would probably be of most interest to those studying astronomy at school, possibly as part of the International Baccalaureate. Articles are uploaded regularly and contain links to further sources of information as well as relevant images. The site would also be of interest to those who just want to be at the forefront of space and its exploration. There are adverts on the webpages; however, various subscriptions can be purchased that will remove them if you find them a nuisance.

www.futurity.org

Futurity covers the latest discoveries from universities worldwide and aims to share research directly with the public. Generally, articles seem to be quite wordy with little to break up the flow of script; however, occasionally there are relevant images to accompany the text. Within each article there are links to other topics of interest and the article itself is fully referenced, so it is possible to go back to the original research if desired. There is no advertising material to break up the flow of the text and to distract from the message being put across. This site would be useful in teaching; however, some degree of teacher vetting beforehand would be necessary in order to confirm the material present was suitable as lesson material.

https://eos.org

Eos, from the American Geophysical Union, is a source of news and perspectives about Earth and space science. Articles vary in length but are invariably interesting and have a link to the original research so that each topic can be considered further if necessary. At the time of writing, some of the articles were written in languages other than English so could be useful if any cross-curricular activities were required. Each page also contains links that are used to explain topics further or to give definitions of terms used. This site would generally be of interest in a teaching situation, but would require teachers to go through it first to check the relevance of material to the teaching curriculum.

www.zmescience.com

ZME Science covers research and developments from all scientific fields. Articles are presented in a language that is accessible to all, but be aware that, as the audience is predominantly American, there is some focus towards American science. Articles generally are not very long and could be used to provoke discussion in the classroom. The site comes with advertising on each of the pages, but it is possible to switch it off and so make the material flow more easily.

Contributor

David Moore, editor of *Science websearch*, is a former teacher of chemistry at St Edward's School, Oxford.