## No escape from (Virtual) Reality

In virtual reality (VR), a computer is used to recreate a 3D environment that a user can interact with. At present, this is usually done with a special headset. Some have built-in screens, others, such as Google Cardboard, are just holders for smartphones. Some teachers are beginning to use the technology in lessons. Are there any safety issues that we should consider?

At a recent meeting of a British Standards Committee that deals with optical radiation hazards, a member stated that there is no risk associated with the light emitted by the screen of a VR device. He added, however, that there were numerous reports of people feeling unwell after using the technology. It appears that VR sickness is a recognised phenomenon.

The cause of this sickness, which manifests in various ways such as nausea and dizziness, is not well understood. It is thought by some to be similar to motion sickness. The theory often used to explain this is sensory conflict. Information from your eyes does not match that from your vestibular system, the latter being the mechanism involving parts of your inner ear that are responsible for balance and perception of orientation.

Children from 2-12 are particularly sensitive to motion sickness and therefore may be more likely to feel ill when using VR. The most sensible control measure is to limit use. We suggest no more than 5 minutes of uninterrupted virtual reality for primary and early secondary children. Pupils should be sitting down and there should always be a responsible adult who can observe the children, unimpaired by a headset.

Is the "5 minute" limit too draconian? Perhaps you use VR yourself. Please tell us about your experiences.



## Product recall: Rapid 318C digital multimeter

We have been informed that the Rapid 318C digital multimeter has been recalled. The company states:

As a precautionary measure, we have initiated a recall of the above product. This is due to a possibility of it not reading AC voltages correctly. In extreme cases use of this product may lead to an electrical shock hazard. On further investigation, we were informed that this only applies to the 200/600 V a.c. range. Nobody in a Scottish school should be measuring a.c. voltages anywhere close to these values. In other words, you are unlikely to use this range setting. Nevertheless, the company suggest you contact them for a free replacement.

The SSERC Bulletin is published by SSERC 2 Pitreavie Court South Pitreavie Business Park Dunfermline KY11 8UU Managing Editor Fred Young Telephone 01383 626 070 Fax 01383 842 793 E-mail sts@sserc.org.uk Website www.sserc.org.uk