

# Energise!

## food for sport



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*Titchmarsh Church of England Primary School is a small school with strong Christian values in rural Northamptonshire, attended by seventy pupils aged 4 to 9 years. The school is forward thinking and in the last three years has received a number of prestigious awards. As a result of a recent curriculum review staff have been looking at how subjects can be connected in relevant and stimulating ways to improve learning and outcomes. Evelyn Clawson, Design & Technology Subject Leader, reports on a unit of work set in the context of the 2012 Olympic Games.*

### The brief

In this unit of work pupils enjoyed learning new skills in a number of subject areas including: design and technology; use of language; ICT; mathematics; science; and PE. Year 3 and 4 pupils from a mixed-aged class were asked to design and make a sports nutrition product, with packaging, for the school sports day. The pupils were organised into technology teams to plan and work collaboratively, each having a role, such as photographer, journalist or team spokesperson. We started the six-week D&T unit with a video of Olympic sports events followed by a lesson on the importance of nutrition to peak sports performance. We used The Food Standards Agency 'Eatwell Plate' model ([www.eatwell.gov.uk](http://www.eatwell.gov.uk)) to learn more about eating a balanced diet and enjoyed sampling commercial food products, specifically aimed at sport. Products were analysed for their taste,

texture, appearance and energy content and pupils recorded their findings on star profile charts, which they then used to inform their own product designs.

### Designing

One of our governors, Norm Edwards, is a product designer and we invited him to talk us through his designs for sports drink bottles created for a major company (go to [www.originaljuice.co.uk](http://www.originaljuice.co.uk) to see Norm's website). Norm used a slideshow of his original sketches to encourage pupils to 'think outside the box', teaching them how to create ideas through 'thought showers' and asking them to think of colours associated with energy and nature. Pupils' discussions about their products and the image they wanted to project revealed many innovative ideas for transporting, opening and drinking their products. Norm showed us his sketching and designing techniques by connecting his digital tablet to our interactive whiteboard, using Alias Sketch software to give a professional quality to some pupils' designs. Seeing the ideas on the large screen enabled everyone to celebrate and evaluate each other's ideas.



### Making

A discussion about reducing waste and re-using resources led to the identification of cotton as an environmentally sound fabric suitable for packaging the sports food products and pupils went on to make simple cotton sacks with a drawstring (using sewing machines borrowed from Northamptonshire Local Authority). Pupils had the choice of transferring their designs onto the cotton bags by drawing on the fabric directly by hand or by heat transfer from an image printed onto transfer paper. As many pupils are very confident in drawing it was easy to create separate groups for the two different methods.



Then it was all hands on deck to make the wide array of nutritious, and delicious, drinks and energy bars: from milkshakes, smoothies and fruit juice to energy bars. All the recipes were both original and imaginative and following the closely supervised making stages the

products were stored in readiness for testing. Scientific knowledge and investigational skills were applied to the testing of the products and pupils had great fun comparing their sporting abilities before and after consuming their sports drinks or energy bars. Outdoor activities ranged from sprinting and long distance endurance runs, to throwing and jumping activities, all accurately measured with stopwatches and measuring tapes. Every second and centimetre counts when it comes to winning and the team approach fostered a sense of responsibility and co-operation – highly effective in developing life skills such as listening to others and negotiation.

### Evaluation

This unit of work was very popular and it was rewarding to see pupils so excited by their design ideas and so motivated by the sheer enjoyment of doing purposeful and practical activities. The project offered me a lot of scope for planning rich and engaging learning opportunities, whilst it clearly captured pupils' imaginations, shown by the fact that many spontaneously created jingles, adverts and persuasive posters for their products without invitation. That doesn't happen very often in a busy classroom! ■

