

## FLASH, BANG, BOOM: SCIENCE GOES POP

A new wave of science centres will get your kids fizzing. Vincent Crump finds five sparky breaks for half-term

### 1 THE BIG IDEA, IRVINE

THE "WORLD'S first inventor centre" is a giant dune-shaped building topped by grass and heather on the Ardeer Peninsula, where Alfred Nobel built his dynamite factory. It opened in April 2000 and cost £15m.

**What's the attraction?** The Big Idea is a nuts-and-bolts exploration of how things work, using interactive models to strip away the secrets of everything from springs (the wristwatch) to rings (the telephone), and propellers (the hovercraft) to tellers (the cash machine).

If your children are more disposed to wanton destruction, they may prefer the History of Explosions. A volatile compound of movie and white-knuckle ride, it zips from the Big Bang to the atom bomb in seven breathless minutes.

The Big Idea aims to inspire the inventors of the future, so every visitor receives a free kit to build at home. Choices include an electric racing car, a kaleidoscope, a burglar alarm and a personal organiser.

**The kids say:** "I quite liked seeing Newton's apple — you pull a lever and gravity makes it drop. I don't know who Newton is, though. The inventor kits are fun to build — we've come home with five rockets and four cars!" — Sarah Mann, 10

**Make a weekend of it:** the Thistle Hotel (01294 274272), Irvine, makes a big splash with kids. Its Hawaiian-style pool complex has a water slide, and you can book a family room with patio doors opening onto the poolside. From £85 B&B for a family of four.

□ *The Big Idea is on the Harbourside in Irvine, half an hour's drive from Glasgow and Prestwick airports. Open from 10am-5pm Wed-Fri; 10am-6pm weekends; £7.95 adult, £5.95 children, £24 family of four. Further information: 0870 840 4030; www.bigidea.org.uk*

### 2 EARTH CENTRE, DONCASTER

IT'S TAKEN £40m to transform a smear of defunct South Yorkshire coal pits into this environment park beside the River Don. Less than 10 miles from Magna, the Earth Centre is a good place to blow off steam if you're planning a two-day trip.

**What's the attraction?** The galleries are a wow, weaving art and technology into a spectacular story about sustainability. Outside in the 400-acre country park, it's full-on fun: have a go at archery, skid down a zipwire and tackle adventure playgrounds fit for commandos.

What children will remember most, though, is being a water droplet on a gripping simulator ride through the water cycle; and the Living Machine, an organic sewage works that uses tropical plants to clean up the Earth Centre's waste. Not to be pooh-poohed.

**The kids say:** "I wanted to go on the water-cycle ride again and again, and the climbing wall was awesome. But it's a shame the Natureworks area was closed for winter because I wanted to see the insect houses." — Victoria Potter, 8

**Make a weekend of it:** The Ardsley House Hotel (01226 309 955) in nearby Barnsley has its own spa and swimming pool. Kids under 12 stay free when sharing; a family room for four costs from £84.

□ *Earth Centre is on the A6203 at Conisbrough, three miles from the A1(M), junction 36. Open 10am-4pm daily; £4.50 adults, £3.50 children, £12.50 family of four. Outdoor pursuits cost extra. Further information: 01709 512000; www.earthcentre.org.uk*

### 3 EXPLORE-AT-BRISTOL

OPENED IN July 2000, Explore-At-Bristol is part of a £97m fusion of three attractions, including Wildwalk (an undercover rainforest alive with birds and butterflies) and an Imax complex.

**What's the attraction?** It's certainly original. In the Brain zone you get to be a virtual sperm on a journey through the science of reproduction, and then visit the world's only Walk-in Womb (complete with wheelchair access). The Curiosity zone features a 7ft-high tornado; and kids can have a go at being top of the pops in the mini television studio. Encourage overactive youngsters to try the child-powered waterworks, driven by a giant human hamster-wheel.

**The kids say:** "I liked presenting the weather in the TV studio. The best thing is being able to touch so many things. Your parents would go mad, but at Explore it's okay. But I was disappointed that some of the exhibits weren't working." — Mark Jones, 10

**Make a weekend of it:** the spanking new Brigstow Hotel (0117 929 1030) is just a 10-minute walk along the harbour from Explore. It has great river views and there are ferry tours from outside the door. Inside, the bathrooms have built-in televisions, which should encourage even the muckiest pups to get clean. From £135 B&B for a family of four in connecting bedrooms.

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□ *Explore-At-Bristol is on the Harbourside in the city centre. Open every day, 10am-6pm; £7.50 adults, £4.95 under-16s, £21 family of four. The Imaginarium costs £2/£1.50 extra. Further information: 0845 345 1235; www.at-bristol.org.uk.*

## 4 NATIONAL SPACE CENTRE, LEICESTER

OPENED IN June in a 140ft "rocket tower", the Space Centre cost an astronomical £52m.

**What's the attraction?** Five minutes of oxygen remaining, a meteoroid storm on its way ... and you're in mission control. Find out if you're made of the right stuff with a role-playing spin in the centre's space-shuttle simulator. That's a special treat for February (see details below), but the main exhibition is split into five portals, where eager space cadets can launch model rockets, train to be an astronaut or forecast the next day's weather using real satellite pictures.

There is £11m worth of serious hardware on display, too, including a Soyuz space capsule and a Blue Streak satellite launcher from the 1960s. The Space Now area offers a window on current interstellar action, as Leicester University scientists beaver away on instrument-building and research.

**The kids say:** "My favourite was using fizzy water to launch a rocket. And also when they take a picture that shows how you'd look as an alien. My little sister had a big, long chin — which scared her, because she's only two! The real-life spacecraft were boring, though. You're not allowed to go inside them." — *William Kelleher, 7*

**Make a weekend of it:** the fun-sized, family-run Belmont House Hotel (0116 254 4773), in leafy New Walk, is close to the city centre; the family rooms are homely and Bowie's Bar is child-friendly. From £80 B&B for a family of four.

□ *The National Space Centre is two miles north of Leicester city centre, just off the A6. Open 9.30am-5pm Tue-Sun, and from noon on Mondays during school holidays; £7.50 adult, £5.50 under-15s, £22 family of four. Further information: 0870 607 7223; www.spacecentre.co.uk*

## 5 W5, BELFAST

PART OF Belfast's £91m Odyssey entertainment complex, Whowhatwherewhenwhy (W5) opened in March 2001.

**What's the attraction?** Five exhibitions with a fun-and-games feel. Challenge fellow visitors to a mammoth tug-of-war to learn the principle behind fulcrums; build your own car and race it on the giant track; and, most startling of all, see the fire tornado, a 15ft vortex of flame.

Tot gourmands can find out about nutrition in a shrunk-to-scale supermarket (part of a dedicated zone for the under-eights); musical youths get to play a harp with lasers for strings; and larcenous little ones can learn to crack safes and beat a lie detector. There is also a chance to become the next Nick Park in W5's stop-frame animation studio.

**The kids say:** "It was brilliant. You can make a roller coaster, do puzzle challenges and I learnt how to send an e-mail. I didn't like the wheelchairs, though. They were supposed to teach you about friction, but when I raced my friend, my hands got sore." — *Kelly Murphy, 10*

**Make a weekend of it:** the smart McCausland Hotel (02890 220200) is a five-minute stroll from W5 away along the Lagan. It serves child-friendly food all day, with kids' CDs and videos for keeping youngsters occupied after supper. A "junior suite" for four with interconnecting bedrooms costs from £320 B&B.

□ *W5 is at Abercorn Basin in the city centre. Open 10am-6pm weekdays and noon-6pm weekends; £5 adult, £3 child, £14 family of four. Further information: 028 904 67700; www.w5online.co.uk*

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*Lees bij de volgende vragen steeds eerst de opgave voordat je de bijbehorende tekst raadpleegt.*

## ■ Tekst 11 Flash, bang, boom: science goes pop

Je bent met je kleine nichtje en neefje op vakantie in Engeland en wilt een "science centre" bezoeken.

Ze zijn erg geïnteresseerd in het menselijk lichaam.

- <sup>1p</sup> **40**  Staat er een "science centre" bij dat aandacht besteedt aan het menselijk lichaam? Zo ja, noteer de naam van dit "science centre". Zo nee, schrijf op "Nee".