

THE NAVIGATOR

## Futuristic Technology

A COLLECTION OF TOP OF THE RANGE TECHNOLOGICALLY ADVANCED PRODUCTS PROVIDING VISUAL AND ACOUSTIC EXCELLENCE

### Spy Ear

Spy Ear helps you listen to people, birds and pets too. It comes with a sound collector, a binocular (for getting a closer look at things), and an attachable flash light. So all you James Bond lovers get going with this spy ear!



### Colour-flipping Ball

Toss it in the air and watch the colours magically flip! This handheld, magical colour-changing ball transform back and forth between two colours. So see the ball change colour magically in mid air!



### Pig-e-Bank

When you place a coin in the Pig-e-Bank, it tells you what coin you have deposited. The LCD screen will also tally your deposits and give you a bank balance! And when you want your money back simply press his nose and watch his mouth drop open to release the coins. Go ahead save money and know its value!



### World Map

Have fun learning about the world with this interactive around-the-world map. Discover fun facts about 19 different countries of the world. There are nine different facts to learn about each one! Features over 1,000 quiz questions to test your worldly knowledge.



### Robot Arm Kit

Perfect as a present to inspire your child's inquisitive mind, this Robot Arm Kit teaches the basics of electronic and mechanical engineering in the most fun way. The robot arm can move in a number of directions and even pick up light objects. It can also be used in the dark, thanks to its claw-mounted LED light. So get the joy of seeing their creation come to life!



### KNOW YOUR FACTS

- In Beijing, the Internet community has coined the word 'Chortal' as a shortened version of 'Chinese portal'.

- Telnet is one of the oldest forms of Internet connections. Today, it is used primarily to access online databases.

- Domain names can be sold at high prices! The most expensive domain name was 'business.com', which was bought by eCompanies for \$7.5 million in 1999.

- Ray Tomlinson, a scientist from Cambridge, introduced electronic mail in 1972. He used @ to distinguish between the sender's name and network name in the e-mail address.

- The Internet is the third-most used advertising medium in the world, closely catching up with traditional local newspapers and Yellow Pages.

- It took 13 years for televi-



sion to reach 50 million users- it took the Internet less than 4 years.

- As of now, there are over 260 million people with Internet access worldwide.

- The average computer user blinks 7 times a minute.

- In 1946, the Marriam Webster dictionary defined computer as 'a person who tabulates numbers; accountant; bookkeeper.'

- An estimated 2.5 billion hours were wasted online last year as people waited for pages to download, according to a study sponsored by Nortel Networks.

### MEDTECH

#### Compas Leg Prosthesis

The Compas is a wireless device that attaches to the prosthetic leg and constantly monitors its movement, sending data back to a computer for software analysis. The plate has silicon strain gauges to measure forces going through the prosthesis. The diagnostic module that is attached to the plate in the prosthesis contains a laser to project a line on the floor as the patient walks, and a gyroscope that measures the rotation of the limb. Each module can be used with multiple patients.



SCIENCE TEASER

The magician performs a trick. He takes a glass jar filled with water. He shows it to the audience even inviting some members to examine it and declare that it is just water. He then closes his eyes and starts waving a closed fist around it while loudly chanting the mantra 'Abracadabra'. Suddenly he opens his eyes and throws open his fist in the jar. The liquid in response starts getting agitated. Suddenly it catches fire and water starts burning. He looks at the audience expectantly and everyone responds with a standing ovation. Sachi also joins but she thinks that this was a chemical reaction. Was she right in her analysis?



Yes indeed. What the magician has shown is no magic. It is simple chemistry. What happened on the stage is a well known chemical reaction. When he opened his fist and threw it in the direction of the jar full of water, what he did was to throw some elemental sodium, pieces of sodium metal, in water. No sooner did sodium come in contact with water, than it started melting and producing hydrogen. In the process, some heat was also released. That ignited the hydrogen gas which started burning. The magician, of course, knew his chemistry. That is why he threw small granules of sodium in water. Had he put in a bar of metal there could even have been an explosion in the auditorium.

Solution