Read the extract carefully, then answer the questions in the answer booklet provided.

These articles were written for a magazine celebrating the Golden Jubilee of Queen Elizabeth in 2002. The first reflects on the advances in science and technology; the second looks at changes in food tastes over the 50 years of her reign.

Talking about a revolution

Sitting in my old, heavily-beamed cottage, it seems that the 21st century is a long way off, as I gaze over miles of green English countryside. But it's due to a revolution that I have the freedom to live here, high in the Chiltern Hills – a revolution in information and electronics.

When the Queen acceded to the throne, the information explosion hadn't even been predicted. Computers were the size of buses, and phoning abroad was a tricky business. Now I can e-mail anywhere in the world in an instant. If I want to check a fact, I go into a search engine on the internet. When a radio station wants an interview, I re-route my ISDN telephone line – which usually brings the internet into my computer – to a mixer. To me, this is one of the greatest advances in science and technology that has taken place since 1952. And there have been countless others. Fifty years ago, Britain was a very different place; one that our Victorian and even Georgian ancestors would have recognized. People lived life much as they had in the past.

In fact, a lot of people hanker after those "good old days", but in many respects they are an illusion. Advances in medical science over the past 50 years have meant that we are living longer, and in many cases, more healthily. We're learning to control disease. And we are getting a better understanding of how life itself works.

Part of the reason for our heightened concern for the environment of both our nation and our planet is because we can accurately monitor changes from space. From the vantage-point of satellites – many built in Britain – we can now see the devastation to the rain forests, or industrial pollution, as it happens. Satellites have brought many far-reaching changes into our daily lives. Instant communications, a choice of hundreds of television channels and more accurate weather forecasts are all the result of a host of satellites patrolling the high frontier.

Space is, of course, another major breakthrough of the past 50 years. When England's Astronomer Royal heard rumours that Russia had launched Sputnik in 1957, he dismissed them as "utter bilge". What would he have thought, just 12 years later, when men were walking on the Moon? Today, we have sent spaceprobes to every planet of our Solar System except distant Pluto; around 400 people have flown in space; and we're on the dawn of space tourism, when anyone with the necessary money will be able to see the Blue Planet from orbit.

There will be places where we can never go, but that hasn't stopped astronomers from performing some exquisite hands-off detective work. During my lifetime, which virtually coincides with the Queen's reign, I have seen a breakthrough in our knowledge of the cosmos as dramatic as when Galileo first pointed a telescope to the heavens.

Thanks to cutting-edge technologies, new windows on the Universe have opened up. Radio astronomy, as exemplified by the huge telescopes at Jodrell Bank and Cambridge, is one of the British-driven initiatives which look at the cosmos that light does not reveal. So too, does X-ray astronomy – also pioneered in Britain – which seeks out cosmic violators such as black holes and exploding stars. Over the past 50 years, British astronomers have helped build up a picture of the way our Universe works – and these discoveries are being used by physicists to build up a description of it and of what makes it tick.

Dr Heather Couper (broadcaster and writer on astronomy and science)

CONTINUE TO THE NEXT PAGE

Taste of the times

Although the war had ended nearly eight years before, times were still tough when the Queen was crowned. Rationing did not end until the following year, and I remember the horrified silence that greeted my brother dropping our whole family's weekly egg ration (four eggs in a paper bag) onto a stone floor. My mother scooped them up.

Sweets were rationed too. Once, sorry for some prisoners of war digging a trench in the Edgware Road, I held out my bag of toffees for them each to take one. The first one took the whole bag. Never mind, said my mother, you'll get another bag next month, and they won't.

If the diet was dull, it was healthier than it has ever been since, with plenty of potatoes, bread and vegetables and precious little protein. Our steady progress to fattest nation in Europe began with the end of rationing in 1954.

By the Seventies, supermarkets were ousting local shops with bulk buys and TV dinners. Frozen veg was now more popular than canned. By the Eighties, we'd learnt that olive oil was not just for soothing earache and we could buy ready-washed salad and chilled tiramisu. By the Nineties the supermarkets were selling fresh Indian curries, and by the end of the century the affluent customer did not need to cook at all.

Preparing food had been getting easier if you had the money. Food mixers, pressure cookers, automatic cookers and, above all, freezers made life simpler. By the boom-time Eighties the wealthy boasted designer kitchens, often with machines to make ice-cream, pasta, bread and cappuccino.

Prue Leith, OBE (chef, restaurateur and author)

1 In what year did the Queen celebrate her Golden Jubilee?
Mark your answer in your answer booklet.

A 2000
B 2002
C 2052
D 1952
E 1992

2 Which of the following does not describe where the writer of the first article lives?
Mark your answer in your answer booklet.

A in the countryside
B in a beamed cottage
C in a Victorian house
D in the Chiltern Hills
E in England

3 How quickly can an e-mail be sent? Mark your answer in your answer booklet.

A in a minute
B in a second
C in an hour
D in a day
E in a week

4 How does the writer of the first article check her facts?
Mark your answer in your answer booklet.

A using e-mail
B on the radio
C in a book
D on the telephone
E using the internet

5 Why do you think the fact that Dr Heather Couper can hold a radio interview from her home is such a great advantage to her? Mark your answer in your answer booklet.

A It saves her a great deal of time when she would be travelling to and from interviews.
B She can have a cup of tea while giving the interview.
C She can work at the same time as talking on the radio.
D It means she doesn't miss her favourite television programmes.
E If she is ill she can stay in bed and give the interview.

6 What was life like in Britain 50 years ago? Mark your answer in your answer booklet.

A much the same as now
B nothing like the Victorian times
C much the same as now but with better medical care
D very different from now
E much the same as now but with worse medical care

7 In which area of science have the most significant advances been made which enable us to live longer than we used to? Mark your answer in your answer booklet.

A medicine
B astronomy
C environmental
D electronics
E industrial

8 What has led the human race to be more aware of the environment now than 50 years ago? Mark your answer in your answer booklet.

A We enjoy activities outside more.
B We do projects on the environment in schools.
C Devastation in the rain forests worries us.
D Satellites enable us to see the damage being done to our planet.
E Satellites bring us hundreds of television channels.

9 According to the first article, which of the following are ways in which satellites have enhanced our daily lives?
1 They provide more accurate weather forecasts.
2 They give us instant communication.
3 They provide more information about space.
4 They enable us to receive many television channels.
Mark your answer in your answer booklet.

A 1 and 2
B 2, 3 and 4
C 1 and 4
D 1, 2 and 3
E 1, 2 and 4

10 In what year did men first walk on the moon? Mark your answer in your answer booklet.

A 1952
B 1957
C 1968
D 1969
E 1979

11 When does the writer believe we will be able to take holidays in space? Mark your answer in your answer booklet.

A in 12 years
B We already have, since 1957.
C anytime from now on
D in 50 years
E never

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12 Which planet is the blue planet? Mark your answer in your answer booklet.

A Earth
B Pluto
C Mercury
D Mars
E Venus

13 Approximately how old is the writer of the first article? Mark your answer in your answer booklet.

A 45
B 50
C 55
D 60
E 65

14 How does the work at Jodrell Bank benefit us? Mark your answer in your answer booklet.

A It helps us see exploding stars.
B It provides us with clear radio stations.
C It looks after the money that enables us to travel into space.
D It gives us an insight into the Universe.
E It provides money to finance investigations into the Universe.

15 Why was there a 'horrified silence' when Prue Leith's brother dropped some eggs? Mark your answer in your answer booklet.

A because he had made a mess
B because he was being naughty when he dropped them
C because they were very expensive
D because he had broken the only eggs the family would get for a week
E because he slipped and hurt himself

16 Why does Prue Leith suggest that the diet was much healthier during rationing? Mark your answer in your answer booklet.

A A lot of protein was eaten.
B Sweets were rationed.
C It included a lot of vegetables and bread.
D Eggs were rationed.
E Both sweets and eggs were rationed.

17 How do you think local shopkeepers felt with the onset of the Seventies? Mark your answer in your answer booklet.

A excited as they could now sell frozen vegetables
B worried they wouldn't have enough room for all the new products being sold
C happy as they were already stocking olive oil for earache
D concerned as supermarkets began to take their trade
E pleased they could get rid of a lot of their canned vegetables as people were buying frozen ones instead

18 Which of the following appliances had the greatest impact on the foods that were bought and eaten during the Seventies? Mark your answer in your answer booklet.

A pressure cookers
B freezers
C ice-cream making machines
D automatic cookers
E food mixers