SECTION 4

Many believe that the story first began in America in 1877, when two friends were arguing over whether a horse ever had all four feet or hooves off the ground when it galloped. To settle the bet, a photographer was asked to photograph a horse galloping and the bet was settled because you could see that all the hooves were off the ground in some of the photos. *Q31* What was even more interesting was that if the photos were shown in quick succession the horse looked like it was running – in other words 'moving pictures'.

The person who became interested in taking the moving pictures to its next step was the famous American inventor Thomas Edison. Actually, he didn't do the work himself but rather asked a young Scotsman in his employ to design a system, which he did. Now this young fellow was clever because the first thing he did was study other systems – primitive as they were – of moving pictures and then put all the existing technologies together to make *Q32* the first entire motion picture system. He designed a camera, a projection device and the film. The system was first shown in New York in 1894 and was really very popular. Apparently people lined up around the block to see the wonderful new invention. There were, however, a couple of problems with the system. The camera weighed over 200 kilograms and only *Q33* one person at a time could see the film.

Well now, news of the new system in America travelled fast and a number of rival European *Q34* systems started to appear once people had heard about it. The single problem with all the systems was they couldn't really project the film onto a screen – you know, so more than one person could see it. Then in 1895, three systems were all developed, more or less at the same *Q35* time and independently of each other. I guess the most famous of these was by the Lumière Brothers from France, and they called their system the *cinematographe* which of course is where the word cinema comes from. There were also two brothers in Germany who developed a successful system and they called it a *bioskop*.

Well now, once the problem of projection had been solved, the next challenge for the inventors was to make the films longer and more interesting. A continuing problem at the time was that the films had a tendency to break when they were being played – a problem *Q36* which was caused by the tension between the two wheels, or 'reels' as they are called, which

hold the film. Now this problem was solved by two American brothers. They developed the 'Lantham Loop', which was the simple addition of a third reel between the two main reels, and this took all the tension away with the result that the film stopped snapping.   *Q37*

So now there was a real possibility of having films of more than two or three minutes, and this led to the making of *The Great Train Robbery* – the very first *movie* made. It only   *Q38* lasted 11 minutes but was an absolute sensation, and there were cases of people watching the movie and actually fainting when the character fired a gun at the camera! Almost overnight movies became a craze, and by 1905 people in America were lining up to see movies in 'store theatres', as they were called then.

I guess the next big step in terms of development of technology was to have people actually talking on the film, and the first step towards this was in 1926 when sound effects were first   *Q39* used on a film. It wasn't until the following year however that the first 'talkie', as they were called then, was made. This film featured actors speaking only during parts of the film and was called *The Jazz Singer*, and it wasn't until 1928 that the first all-talking film was produced, and this was called *The Lights of New York*. Unfortunately, the sound on this early film was not very good and I believe they put subtitles on the film – that is, they printed the dialogue along the bottom of the film to compensate for this poor sound   *Q40* quality. Now, with the addition of sound, moving pictures became far more difficult to make . . .