

Part 1.

M: Here is your big chance to win a dream night at the Congress Theatre, right in the centre of London! After a very long and successful world tour, the sensational production of Tim Rice and Andrew Lloyd-Webber's all-time classic *Joseph and the Amazing Technicolour Dreamcoat* is heading to the Congress Theatre this summer. The Congress Theatre is right in the heart of the theatre district of London and performances will start on Monday June 18th and run through to Saturday June 23rd. You can't miss these dates!

Four lucky listeners will have the chance to win a pair of top-price tickets for the opening night in this free-to-enter competition. You will also win free ice-cream, drinks and sweets while you watch the performance. At the end of the performance, we will take you backstage to meet the actors. They will also show the technical side of the performance and of course you will see the *Technicolour Dreamcoat* up close.

Mid-week performances are at 7.30pm every evening and the matinee performances start at 2.30pm from Tuesday to Thursday. On Friday and Saturday there are two evening performances at 5pm and 8pm. The Saturday matinee performance will be at 2pm. Tickets are going fast and are priced from £11 to £24.50 with concessions available for selected performances.

To book, call the box office on 01323 412000, or online at www.londontheatres.co.uk. To enter our competition, simply answer the following question by June 13th: Name a song from *Joseph and the Amazing Technicolour Dreamcoat*. Good luck!

Part 2.

Host: Today in the studio we have Dr. Lafford from the Forensic Science Service. In many ways, it's a development of Sherlock Holmes and his magnifying glass, isn't it?

Dr. Lafford: Yes, you could put it that way, although we've come a long way since then. Of course, he was an intelligent man and his medical knowledge often seemed better than that of Dr. Watson, and certainly his observations were always very detailed. But what sets him apart is that Holmes provides us with a good model of the kind of approach, psychological approach, that a forensic scientist should have. And that is that the forensic scientist is absolutely impartial.

Host: So, you're not, strictly speaking, part of the police force?

Dr. Lafford: No, we are quite separate.

Dr. Lafford: Well, the basic principle behind forensic science is that every contact leaves a trace. Wherever we go, whatever we touch, material is transferred both ways.

Host: So the scene of the crime leaves clues on the suspect?

Dr. Lafford: Absolutely. And that is normally the most compelling evidence. Not just when you have a fingerprint, but also where you found traces of the carpet at the scene of a crime on the suspect's clothing. And that can be very hard to explain away.

Host: Is your work fairly straightforward? A question of seeing whether various samples match up?

Dr. Lafford: No, not at all. Forensic science is often a very painstaking task, and very time-consuming. Much more so than previously. For example, we might be given some pieces of a headlight swept up after a hit-and-run accident, and asked to identify the car. We could tell whether the lights had been on at the time of the accident by examining the light bulb, because there would be minute pieces of molten glass on the metal filament in the bulb.

Dr. Lafford: The electron microscope is invaluable. It gives us a fantastically detailed image, so you can tell whether a piece of hair has been broken or cut with a pair of scissors or a knife. And it can also give you the chemical composition of a sample, so you can match a tiny flake of paint on a suspect's clothing with paint at the scene.

Host: Could you say that the evidence you provide is foolproof?

Dr. Lafford: No, not foolproof. There is always room for human error... Forensics is not an absolute science. Let me give you an example. Holmes might have found a strand of hair, perhaps black and two inches long. Perhaps one person in 20 has black hair two inches long. So we need to improve on this analysis to narrow down the number of suspects. We would analyze the strand using the electron microscope... and instead of one person in 20, it might be one person in 500,000. There's no such thing as certainty, just a balance of probability, even with the most advanced techniques of genetic fingerprinting. The evidence we provide is there to be interpreted, and that's very important.

Host: Well, Dr. Lafford, thank you very much. We'll take a break now, but stay with us and we'll be back with an expert in the science of...

Part 3.

Lecturer: So, first of all, I'll start by looking at the actual nature of laughter. When someone laughs, you've got movement of the muscles of the face and the chest. So, we're talking about a physical activity. But obviously, other things are involved. Laughing isn't something that you normally decide to do, so it's not voluntary behavior like ordinary speech. Instead, it's regulated by our instincts. And once you start to laugh, it can be quite hard to stop. That's not always under your conscious control, either.

But why do we laugh? In fact, it appears that laughter has little to do with jokes. Only about 10% of laughter is caused by things like that. One suggestion is that human laughter may have originally started out as a shared response to signal relief at the passing of danger. Laughter still seems to be a kind of social signal. It occurs when people are in a group and they're comfortable with one another. And it seems likely that laughter can result in the creation of bonds between the people in the group. And it's precisely because of this social aspect that public speakers and politicians often try to get their audience to laugh. But this indicates that there's a link between laughter and power. This is supported by several studies that indicate that bosses use humor more than their employees.

It does appear that laughter has definite benefits. Laughter provides a harmless way for the release of negative emotions. There are also clear physical effects: laughter speeds up heart rate and respiration, and raises blood pressure. One researcher suggests that a hundred laughs a day is the equivalent of 10 minutes' jogging.

Laughter also helps prevent the stress that so many people suffer from today, which results from the faster pace of life and all that goes with it. It does this by reducing the levels of hormones in the blood which are caused by stress. And in addition, it is known to increase the levels of chemicals that protect the body from infection or pain. And so it helps to boost the immune system.

One interesting study showed that people who had had surgical operations asked for fewer painkillers if they'd been viewing comic films.

In fact, researchers have even shown that the quality of dreams can be positively affected by laughter. A good laugh 10 minutes before going to sleep can prevent you from having bad dreams and give a much more pleasant and restorative night's sleep.

So, there's now little argument that finding things funny and enjoying a good laugh is extremely beneficial to us all.

What we need to consider now are the ways in which laughter can be used as a treatment for people who...