Forensic Skills

WorldSkills UK Forensic Science Pre Competition Activity
Preparing your students for competition
Who should compete?

Not every student is right for these competitions. It takes a broad base of skills and this can put some members of your faculty at a disadvantage. WorldSkills UK Competitions are inclusive and anyone can enter but the competition is designed to find the very best the UK has to offer. Use the downloadable talent spotter document to help you select those with the right skills, in depth knowledge of your students will help guide you.

Competition Information

In past years the competitors have been tasked to carry out three levels of the competition. The first is a poster relating to a specified area of Forensic Science. In the past these posters have been used to help the judges identify who, in their opinion, has the underpinning knowledge and has taken the time to research and display that knowledge. Secondly each competitor has been tasked to carry out a crime scene examination. A brief is delivered and the competitors are individually tasked to process a crime scene. These scenes have included a suspect, a burglary in a room and a death in a cell. Not easy for the most trained CSI. Lastly the competitors have to undertake the analysis of a sample. This can be a hair, a fiber, DNA, paint, glass or any other item designed to fit into the competition. In 2016 the judges will be looking at an aspect of a DNA process.

Holding your own competition

It is advisable that local competitions are held to identify the strongest candidates in your faculty/workplace. These competitions should mirror as much as possible the heats and finals of the National Forensic Science competition. Each competitor should carry
out two tasks. One is to process a crime scene and the other is to carry out the analysis of a sample against known evidence. This analysis can be any item(s) and should be measurable and the same for all those undertaking the local competition in your location.

The crime scene we advise the local competition designs is a burglary with violence in a dwelling. This will enable the marking criteria used in the 2015 finals (below) to be used for these events. You can substitute any item of evidence to ensure the same points are scored and marked against.

Standards

- Each competitor must work to their own standards.
- Each item of evidence will be checked and must correspond exactly to the scene/lab log notes.
- The competition should be timed with no more than 4 hours in the scene and 90 minutes to carry out the analysis of evidence.
- Competitors should be marked down for non-compliance with PPE and un-safe working practices.
- Candidates must work on their own without assistance from lecturers or other students.
- The competition standards should correspond where practicable with the Criminal Justice System NOS and ISO 17020/17025.

Brief for Scene Work

Competitors will attend a scene of crime where they will carry out the normal actions of processing the crime scene within a set time limit, using the tools available. The time allocated is between 4 and 6 hours.

The competitors must be mindful of the rules of evidence, chain of continuity and cross contamination.

All exhibits identified must be recovered using standard processing, recording and recovery techniques. In the event of different teaching systems, the judges will have the ability to make decisions to approve or not those systems.

All exhibits will be entered onto Scene Logs/Books as provided. An example of the scene log to be used in all competitions is available from the organising partner, Complete Forensics, and is the same as the one used during the heats.

All exhibits/evidence correctly packaged, together with the scene logs, will be presented to the judges at the end of the scene examination.
All equipment, including protective clothing, will be provided and competitors will have the opportunity to familiarise themselves with the equipment before the event. A full list will be made available before the finals in order that competitors can speak to course leaders and ensure they are aware of the equipment and its use should they not be familiar with it.

The use of outside influences or conferring with other competitors during this stage of the competition will result in disqualification.

**Brief for Lab Work**

You have in front of you a microscope, a lab book and a pen.

You are presented with a fiber that has been recovered from a crime scene.

You are also presented with items of clothing.

You have four hours to examine and analysis the fiber to find the matching item of clothing.

All of your comments, observations and remarks should be included in the lab book.

You are required to comment on the following questions (write the answers clearly in your lab book):

- What processes can you use on this piece of evidence?
- Identify the items of equipment you need to Does the hair on the balaclava match the suspect?
- If yes, how?
- Any other observations you can provide regarding the sample(s).
- Describe the sample?
- Please list as many analytical techniques you can suggest that would be available to a forensic scientist (and briefly what is being evaluated)
- Deduce the origin of the sample

You have 90 minutes to complete this task.

The judge in the room will not answer any questions relating to your task.

Your notes need to be finished within 15 minutes of the end of your task.

Ensure you place your name on the front of the Lab Book.

You must hand your completed notes to the judge when you leave.

To download the Scene Report click [here](http://goo.gl/ALxQh3)

To download the Lab Report click [here](http://goo.gl/CvtpXC)
<table>
<thead>
<tr>
<th>Aspect ID</th>
<th>Aspect of Criterion - Description</th>
<th>Max Mark</th>
<th>Mark Awarded</th>
</tr>
</thead>
<tbody>
<tr>
<td>A1</td>
<td>Crime scene search techniques Carry out a search for evidence in the scene one of the systematic approaches to crime scene searches, using the correct equipment</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td>A2</td>
<td>Crime Scene Recording Using the scene log correctly annotate all pages with the required markings including signatures and notes about your scene.</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td>A3</td>
<td>Evidence identification From your observations identify all of the evidence in the scene while discounting items not associated with the crime(s)</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td>A4</td>
<td>Evidence recovery/packaging After identifying all items of evidence you must package the items and correctly mark that packaging. Half a mark for correct use of packaging and half a mark for correct markings.</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td>A5</td>
<td>Evidence submission identification Using your log of the scene decide which evidence will make the most cost effective and suitable submission(s) to a laboratory. Remember costs and justice.</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>A6</td>
<td>H&amp;S One mark for each item of PPE used during the scene examination. Marks can be reduced by unsafe practices.</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>A7</td>
<td>Personal Qualities Accuracy and attention to detail, Patience, Good communication skills, Organisational Skills, Logic, time management, Lack of forward planning, dealing with stress, Practice communicating - speak with confidence</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td>B1</td>
<td>Identification of analysis methods Identifying the processes that can be used to achieve the required analysis of this set piece of evidence.</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td>B2</td>
<td>Use of correct equipment Once you have identified the method of analysis you must identify all items of equipment that will be used in the process</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td>B3</td>
<td>Correct outcome Using analysis techniques, equipment and processes identify the correct outcome of the evidence with your reasoning</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>B4</td>
<td>NOS and ISO17025 Show an understanding of NOS and ISO, implementing where possible the standards to achieve best practice and best evidence.</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>B5</td>
<td>H&amp;S One mark for each item of PPE used during the scene examination. Marks can be reduced by unsafe practices.</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>B7</td>
<td>Log Book The log book has a set of instructions in it. These must be used to help you complete the book. Using the log book correctly annotate all pages with the required markings including signatures and notes about your scene.</td>
<td>10</td>
<td></td>
</tr>
</tbody>
</table>