Unit 10: Digital Photography for a Media Production

Resource Pack for BTEC Level 1 / Level 2 in Creative Digital Media Production

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Contents

Teacher's Introduction

This resource has been designed to cover the content in Pearson BTEC Level 1 / Level 2 (First) in Creative Digital Media Production specification for *Unit 10: Digital Photography for a Media Production*.

It contains information sheets containing all of the key theory for each Learning Aim, in the same order as the Unit 10 specification. Interspersed throughout the theory are objectives, key terms, questions and tasks.

In addition to the information sheets are the following:

- *Practical Task* – a scenario-based task requiring learners to demonstrate the skills, knowledge and understanding of the unit to research, plan, produce, and review a series of digital photographs.
- *Learner Checklist* – encourages learners to take control of their progress by helping them identify where they can improve. Can be used for both peer and self-assessment.
- *Crossword* – a fun activity to reinforce the unit's key terminology.
- *Worksheets and Templates* – included to help with practical work that learners will complete during the unit.

Suggested answers to each question in the information sheets, as well as the crossword solution, can be found on pages 42-44. *Please note that these are not exhaustive and there may be alternative acceptable answers.*

Important: All tasks in this resource are designed to provide **practice only**, and are **not** designed or intended as a way for learners to provide evidence for the unit.

September 2016

Aim A – Understand the production of digi

Objectives:

- ✓ To understand the characteristics, features and settings of digital camer
- ✓ To know the different reasons why digital photos are produced and how products.

CAMERAS AND CAPTURING IMAGES

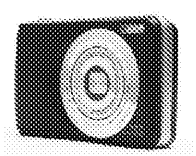
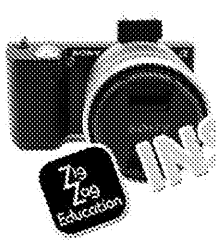
Camera modes

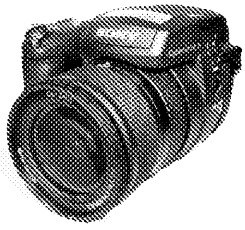
There are a range of different c[illegible]as available that all aim to take high-q these cameras differ in fe[illegible]s such as price, quality and construction, the of control they allow the user to have over the features and can, therefore automa[illegible]

- **Manual mode** refers to a camera setting that allows the user to ha features and settings, which consequently provides the user with photographs that they compose, e.g. DSLR cameras.

- **Automatic mode** is when the camera automatically sets most or al exposure and focus. This usually depends upon factors within the amount of light.

  Although DSLRs also have the ability to shoot images in automati shooting is the only mode available in some common devices such

Camera type	Description
Compact 	A compact (or point-and-click) camera is the m cameras, allowing the user to take photos in d according to a range of predetermined and cr However, the user is unable to change lenses, settings, providing them with less control and
Advanced compact 	An advanced compact camera is similar to a c range of additional features. Firstly, they prov exposure, the ISO (Inte[illegible]onal Standards Or increases ability to [illegible]re photos in low-ligh They also feature more advanced zoom featur only have electronic zoom (enlarging a sectio optical zoom (the use of lenses to zoom). A bigger sensor also generally means that ima standard compact cameras.

Camera type	Description
Bridge 	Bridge cameras are traditionally considered a compact and DSLR cameras – they feature so compact cameras while providing additional f SLR (single lens reflex) cameras. One distinctive feature is the large optical zoo to capture high-quality images at a distance a have larger sensors and better fixed lenses th of field control and macro performance.
DSLR (digital single lens reflex) 	DSLR cameras provid[illegible]ser with full manu settings such as exp[illegible]re and focus. They als and l[illegible]e [illegible]al sensors. They retain the ability to be set to automatic easily and quickly take different types of phot Disadvantages, however, are that they are exp some distortion when recording video, such a

Questions:

1. What is a bridge camera? ***(1 mark)***
2. State an advantage and disadvantage of compact cameras. ***(2 mark***
3. What features set DSLR cameras apart from the other cameras listed

Capturing images

There are a number of features and settings on digital cameras that allow however, these features and settings can also have an impact on image q

- **Viewfinder:** The viewfinder is the name for the opening on a came look through and see the image to be taken, and differs between c

The viewfinder on a compact camera is electronic, and functions by estim will reach the camera sensor to form the image seen. Therefore, it could b accurate representation of the image.

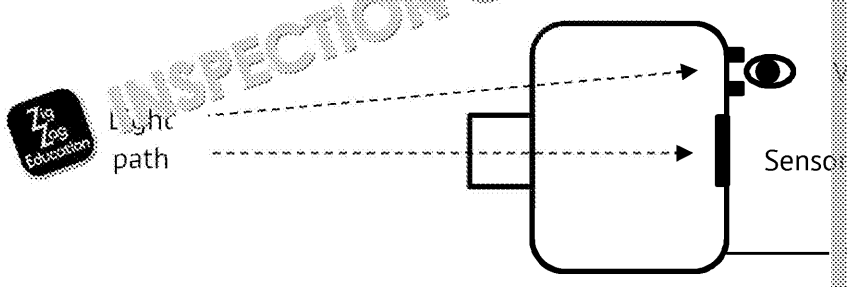
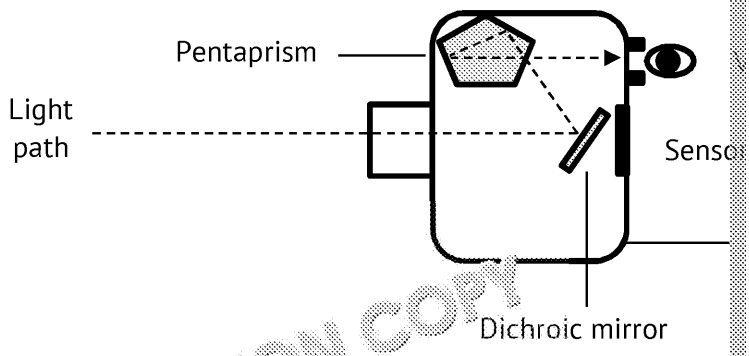


Diagram showing the light path of an electronic viewfin

As shown in the diagram below, the viewfinder within a DSLR works throu
pentaprism and a dichroic mirror that are used to reflect the image projec
viewfinder.



The light is reflected o[illegible] dichroic mirror and then through the penta
the user p[illegible]es [illegible]on to take an image the mirror flips up and the li
the sens[illegible]

Questions:

4. What is a camera viewfinder? *(1 mark)*
5. Explain the difference between the viewfinders on a compact and D

Task:

What exactly is a dichroic mirror? Research how a dichroic mirror reflects
for a DSLR camera.

Lens

Within optics, a lens is a device that uses refraction to change the focus of light. It is one of the components of a camera that allows the user to capture, focus and magnify images. There are two types of lenses available for cameras: zoom lenses and prime lenses.

A zoom lens is one that allows the user to chan[illegible] focal length – and, therefore, the user's perspective a[illegible] view.
The range of a zoom lens is m[illegible] with X and refers to the maximum and minim[illegible] length; for example, a lens that has a focal len[illegible] would be listed as 3X zoom (35 x 3 = 105).

The obvious advantage of a zoom lens is that it takes up less space and re
lenses. However, there are also some disadvantages. In comparison to pri
image quality, decreased autofocus performance and smaller apertures.

The degradation of image quality is especially seen in the corners of the i
maximum focal length.

Prime lenses, on the other hand, only have one focal length – meaning th
view remains fixed.

They do, however, have superior image quality compared to zoom lenses
Other advantages include being lighter, having a wider aperture (which m
low-light conditions) as well as a wider depth of field range.

The main disadvantages of prime lenses are that they are more expensive
than zoom lenses.

Questions:

6. What is a zoom lens? ***(1 mark)***
7. Compare the strengths and limitations of prime lenses compared to z

Image sensor

A camera sensor is a device that's used to read the amount of light within
luminance – that is then transferred and converted into a digital signal a

The process begins with light photons being captured across a range of p

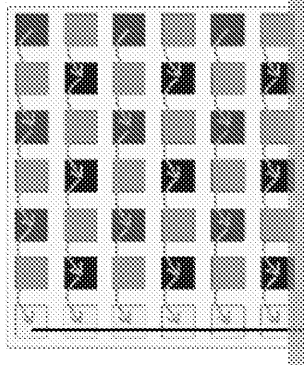
The number of photons is then read and converted into an electrical signa

In a CCD (charged-coupled device) sensor the charge is transferred in colu
read across the bottom row of the chip, where an analogue to digital conv
a digital signal.

CMOS (complementary metal-oxide semiconductor) sensors have a piece
photosite that reads the value and then transports the signal using traditi
this method is that each pixel can be read individually.

There are also a number of additional differences between CCD and CMO

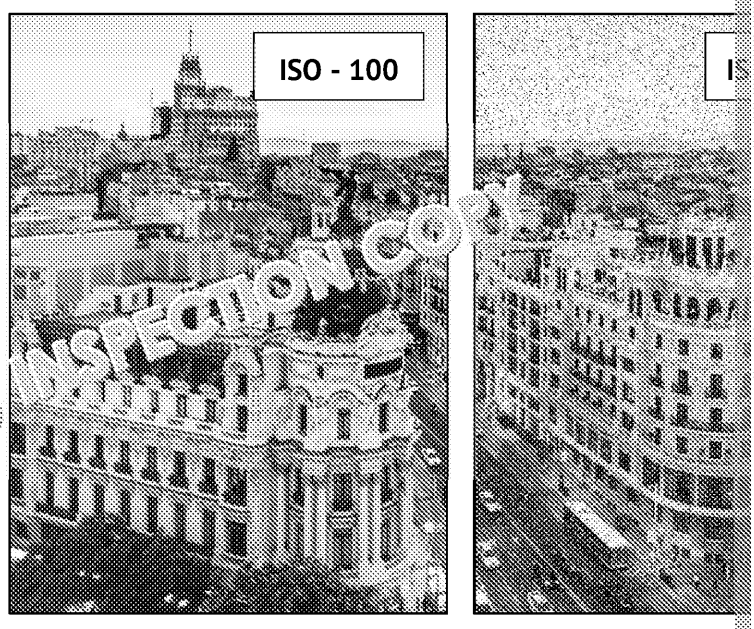
- CCD sensors generally produce higher-quality images, have greate
  pixels, although CMOS sensors are rapidly developing and catchin
- CMOS sensors are also more susceptible to image noise.
- CMOS sensors consume less power; CCD is traditionally less efficient
- Some CMOS sensors are susceptible to the rolling shutter effect w
  varying methods by which light is captured.



*Example showing the metho
sensors transport the electric*

SO is a measure of how sensitive the camera sensor is to incoming light. A
the sensor is more sensitive to light and, therefore, increases the exposur

However, increasing the ISO also increases the amount of noise within th
as a last resort when other light settings are inadequate.



Comparison showing a similar image taken at low and hig

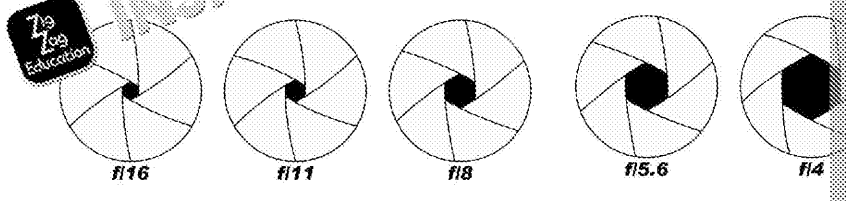
Questions:

8. What is a camera sensor? ***(1 mark)***
9. Explain how data is read from a CCD sensor. ***(2 marks)***
10. *'CCD sensors are better than CMOS sensors'*
    Do you agree with this statement? Provide arguments to support your

Aperture

The aperture is an iris-like opening located within the camera lens. It ope
pass through and into the camera body.

The size of the opening is measured in a unit ca[illegible]-numbers' where the
the unit number increases. It is one of th[illegible] that allow the user to
image.



Less light

Shutter

The camera shutter is a barn-door mechanism located within the body of t
the components that controls the amount of light that reaches the camer

The shutter can open for a predetermined set of time and is measured in
example a shutter speed of 1/250 means that it's open for one two-hundr

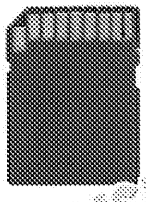
Questions:

11. What does ISO control? ***(1 mark)***
12. Name the three factors that control the amount of exposure. ***(3 marks)***
13. You've taken a photo in low light that has lots of noise. Suggest what
    noise within the photo. ***(2 marks)***
14. *'CCD sensors are better than CMOS sensors'*
    Do you agree with this statement? Provide arguments to support your

Memory

When capturing digital images they need to be saved if they are to be tra
digital cameras don't have internal memory that allows the user to save p
expandable memory solutions such as memory cards.

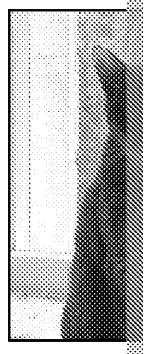
Internal memory is generally limited to other devices such as mobile pho

Storage type	Advantages	
Internal storage This refers to the memory that is already within the device.	• Easy and simply to use. • No need for additional hardware or cost.	•
SD card 	• Widely supported across photographic devices, including variants for mobile phones. • Available in a range of different file sizes and speeds for reading and writing data. • Cheap to purchase.	•

LIGHTING

Flash

Fill flash is a method used to force the camera to activate the flash in order to provide additional light to a scene, in particular to areas of dark shadows. This technique is useful in situations where the background light is significantly brighter than the subject – leading the subject to appear as a silhouette.

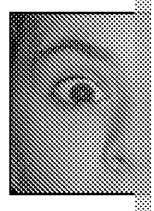


Exam

However, it can also be used in other circumstances where the features of the subject are particularly darke[illegible] example, when there is strong overhead lig[illegible]ting.

It's important to note th[illegible]sh i[illegible]rt meant to be used as the main source Images can app[illegible]ial and overexposed if the flash is too bright for

The red-[illegible]ffect is an abnormality caused when the light of a camera fl retinas of the photographic subject. Due to the speed of the flash the pup constrict and restrict the amount of light entering the eye.



De

Most modern cameras with a flash have an anti-red-eye feature. This works by producing small bursts of light before taking the photo, which allows the pupils time to constrict and, therefore, reduces red-eye.

Another method to reduce red-eye is within image-editing software. Using this process the red pixels are replaced by black and grey

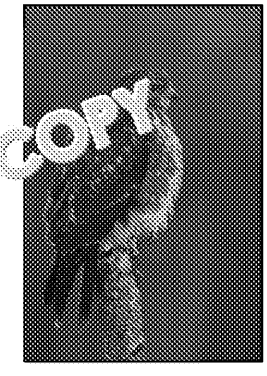
Questions:

15. What is the cause of the red-eye effect? ***(2 marks)***
16. Explain the circumstance in which fill flash is needed and what it aims

Exposure

Exposure describes how light or dark an image is and how certain parts of the image are exposed. It is determined by three individual camera settings (shutter speed, aperture and ISO) and external lighting.

The three exposure set[illegible]ould be used in conjunc[illegible]other to determine the corr[illegible]posure for the circumstance, and shou[illegible]e adjusted in retrospect to another to maintain a level of exposure.



Underexposed

Corre

For example, if the shutter speed is increased then the f-number should b same exposure within the image.

A photo can be underexposed or overexposed depending on the settings. underexposed describes inadequate lighting and overexposed means too intended can create the perception of poor quality.

White balance and colour temperature

White balance is the process of identifying 'true' white to remove unrealis
so that colours (in particular white) look the same in real life as they do w
recorded by a camera.

Digital cameras usually feature an automatic white balance calculator that aims to measure the **colour temperature** and set the white balance according to the environmental surroundings. However, it's also possible to set the white balance to various set default values that are defined by the type of light output spectrum, or manually specify the colour temperature val

Key term

- ✓ **Colou** to des colour the spe measu

Taking photographs under different types of light can produce different c
photographer to ch white balance.

Lights

As previously mentioned, different types of lighting can have different co
changes to the white balance setting of the camera.

Listed below are a range of lighting types and the type of light that they p

Light type	Description
Tungsten 3200 K	Common in house lighting, tungsten lights create It has been suggested that humans naturally prefe night due to the old pre-electric temperature of ca them.
Fluorescent 4000 K	Produces a bright white light that appears to floo
Natural 2000 K – 10,000 K depending on the time of day and weather conditions.	The colour temperature of natural lighting tends t during sunrise/sunset where the sun is lower in th As the sun is higher in the sky, and the sky is clear temperature increases.

Questions:

17. What is white balance? *(1 m*
18. What factor con colour temperature of natural lighting? *(1*

SUPPORT

Handheld

Most cameras feature some kind of ergonomic design which makes them
taking photos and videos. However, there are still some holding positions
stabilise the camera and reduce the likelihood of camera shake.

Firstly, the camera should always be held with two hands no matter the orie
positioned over the shutter button and the left supporting the lens – with th

The elbows should also be facing inwards and feet positioned far apart to

Tripod

A tripod is a free-standing mount that allow[illegible]er to adjust the height
view. As the name suggests, it has [illegible]gs in order to provide a stable
camera – this is a necessity in some areas of photography such as when t
slow shutter speed.

The hea[illegible]e tripod usually has a degree of movement, allowing the us
change t[illegible]eld of vision. There are many different mounts that allow a
surface that can be used within a photo shoot:

Mount type	Description
Monopod	A monopod allows the user hold the camera steady in situa spaces where a tripod may not be suitable – it has a foot p can aid stabilisation. Another feature is that it's extendable so that the user can addition height. This feature also allows the user to extend to reach difficult locations and take self-portraits from a di
Flexible mount	This mount allows the user to wrap the legs around uncon shaped objects such as poles. It can also be free-standing and use a one-height conventio
Head-mount	This allows low-weight cameras to be mounted to the head o photographer – allowing first-person view shots of the action
Roll bar	A roll-bar mount is one that allows a camera to be attached such as a bicycle frame.
Suctio[illegible]	A high[illegible]s suction mount is used within a number of si[illegible]s where other mounts wouldn't be suitable. One example of its use is on a car door.

Questions:

19. Suggest a possible disadvantage of using a handheld camera. ***(1 ma***
20. What is the purpose of a tripod? ***(1 mark)***

FILE STORAGE

File formats

A file format is a method in which image information is stored (or compressed) in a file.

Compression describes the process of gaining an accurate representation of data without degrading the quality of the image to an unacceptable level. The reduction in file size allows more files to be stored and reduces the time required for images to be sent or downloaded over a network connection.

There are two file formats used within digital photography that are used for different reasons:

- *JPEG* – Joint Photographic Experts Group (JPEG) is a file type that was specifically developed for photographic images and uses **lossy** compression. It is commonly used for storing images in digital cameras and displaying images over the Internet due to its low file size and relatively good image quality.
- *RAW* – A RAW file is a **lossless** direct reading of an image from the camera sensor. The main advantage of RAW files is that they contain all of the original image data, while JPEG and other file formats discard some of this colour information, which can lead to visible compres RAW files can then be converted into JPEG files if desired.

Key te

- ✓ **Con** acc at a deg ima
- ✓ **Loss** whic unne ima qua the sma
- ✓ **Loss** tech redu
- ✓ **Pixe** sma bitm

There are, however, a number of disadvantages associated with RAW files large files, which means that less can be stored on a memory card and the longer. They can also take a longer time opening on a computer and may compressed before transferring.

Image quality settings and size

Digital cameras also have a quality setting that when shooting images in level of compression used when saving the image.

Higher quality means that there is a lower amount of compression, which image with greater colour information.

Photo size is also a factor with image quality, in particular when images c could lead to pixellation.

While it is possible to enlarge images safely, rescaling beyond a certain decrease in quality and can show evidence of pixellation – where **pixel** particularly evident when enlarging low-resolution images.

Questions:

21. State one factor that can impact file size. *(1 mark)*
22. What are the differences between lossy and lossless compression typ
23. State four camera properties that can influence image quality. *(4 ma*

DIGITAL PHOTOGRAPHS IN MEDIA PRODUCT

Digital photographs are used in different media products to provide illust accounts of text. They feature in the following media products:

- **E-newspapers:** Within journalism and other information sources, p support any descriptive text and provide the audience with a visua people. Within tabloid papers photos are especially used for shock
- **CD/DVD covers:** Photos are mainly used within audiovisual media pr Firstly, to show the audience who's within the video production or w and secondly to portray a certain style to the audience and assist aud
- **Books:** All types of images and graphics ap n book covers. H to show realism on a novel cover. Th re also instances where has photos of the film ch ct n the cover to help audience as Within material s as t el guides and textbooks, photos are g somethin described.
- **tio /training material:** Instructional material is inherently a p os are primarily used to clearly show the reader how to do a c self-assembly products, what the product will look like once it is c applicable in activities which require precision.
- **Advertisements:** The primary use of advertisements is to persuade product or service being offered. Therefore, the principal use of im advertising is to glamorise the product and portray the image of e increasing the attractiveness.
- **Interactive media:** This refers to websites and other media applica interaction. Within this sector photos are used for a wide range of persuasive purposes.

Visual communication

Visual communication describes how the components of an image are use a message to the audience. This includes text and both symbolic and tech elements of photos such as the underlying messages and the camera lens

Shorthand communication refers to universal symbols and symbolic codes photography to convey meaning or a message to an audience.

The use of colour is an example of shorthand communication that helps t specific idea to the audience.

Common examples include:

Red	to signify energy, war d urgency. In the UK red road si give orders.
Pink	s nally feminine colour, used to symbolise love an
Blue	the colour of the ocean and the sky, is seen as constant in sensation of trust and security. It's commonly used in commu
Green	as the omnipresent colour in the natural world, often symbo
Orange	can represent warmth, energy and friendliness.

Task:
Can you identify three examples of universal symbols? These can be signs waving to symbolise goodbye.

Mise en scène means how a variety of visual attributes are arranged throu
can help to convey meaning to the audience. It's a French word that liter
and includes a number of components such as setting and props.

- **Setting:** This is the location where the photo is taken, and can imp
mood for the audience and influence how they perceive a characte
The set could be in an actual or well-known location to cause a fe
alternatively it could be completely fabricated and unrealistic to c
mystify the scene.
- **Props:** These are portable objects used within an image and can help
scene, characters or themes. Key props could be central to an image
event to the audience; for example, a man with a ring box symbolisin
- **Costume:** The clothing within a productio[illegible]nc[illegible] just used to dress
smallest article of clothing can take on meaning. It can convey per
and event to the audien[illegible]nc[illegible]also the personality of the charact
- **Make-up:** Alth[illegible]forgotten, make-up can be a significant pro
co[illegible]un[illegible]e appearance and personality of the characters to the
[illegible]t when the look of a character aims to induce a certain emotio
Think about a traditional photo of Japanese geisha without make-
same response?
- **Facial expression:** This refers to facial expression and posture of the
The facial expression of a character can be used to convey emotion a
is instantly recognisable. This emotion is further emphasised by com

  On the other hand, conflicting body language and facial expressio
and questioning among an audience.

Text can be used to complement other elements of an image through col
Positioning can also be used to lead the view of the audience towards cer
control the reading direction.

One of the main purposes of text is to provide the user with information t
the product or service that's being offered.

Purposes of digital photos

The purposes or reasons for use of digital photographs can generally be sorte

- To enhance written text-based publications and reinforce the mes
specifically useful within a piece of descriptive text where a photo
understand.
- To market a product or service where a photo is mainly used to de
product being advertised.
- Photos are also used on promotional event material such as adver
publicity and persuade [illegible]e[illegible]come. They commonly provide t
understandin[illegible]t to expect at the event through the use of t
- T[illegible]ne[illegible]erest or awareness in a subject, such as within spo
[illegible]an image is used to provoke shock or amazement and the i
accompanies such strong emotions.
- In media sectors such as news and journalism, photos can be used
to a video – a series of images will usually show the key stages of
the audience to further their realistic understanding.

Task:

Using the Internet find a photo of your choice.

Now identify its purpose and analyse it according it to the mise en scène

Aim B: Explore techniques of digital p

Objectives:

- ✓ To know the different types of photography and the differing technic
- ✓ To be able to store and export digital photographs.

EXPLORING PHOTOGRAPHY

It should be noted that although digital photograph[y] camera features and settings are different to those of traditional film based photography, the techniques, photography fundamentals and outcome remain the same.

Location shots

Location shots refer to photography shoots that take place in outside loca These can require the photographer to undertake various techniques to e that the shoot and resultant photographs are suitable for use.

Location photography can be one of the most uncontrollable environmen the wide range of factors (both human and environmental) that can affect image composition and quality of the photo. One factor that photographe generally abide by when taking outdoor photos is the concept of the 'gold – this is a short window after sunrise and before sunset where there is les contrast and a softer colour palette.

Architectural photography is an example where certain techniques are us employed by photographers to frame photos to incite amazement and a d perspective. Buildings are usually taken from a low angle looking up, whi highlight the height and create the impression of a dominating high-rise reaching into the sky.

When taking rural shots the landscape is usually the feature that the phot audience. A low-angle camera with a wide camera lens is another positio expansive view of the scene.

Cityscape shots (landscape shots of a city) are commonly taken from a hig the spread of a city over the horizon.

Questions:

24. Provide an example of an uncontrollable factor that could disrupt an *(1 m*

Task:

Using a camera and the equipment available, go around your school can shots using the techniques outlined above.

Do you feel that your photos demonstrate the stated audience reactions?

Studio

When taking indoor studio photos, factors of the environment such as lighting can be totally controlled and stylised in the view of the photographer – allowing them to be more experimental with the photo composition.

One popular choice when photographing portraits is to have a shallow depth of field. This means that the subject of the photo is within focus bu anything in the background is blurred or out of focus (the details of how to achieve this effect are explained later).

Pack shots are another type of image taken within a studio environment. usually used for advertising or promotional purposes that aim to gain the generate interest. These photos are usually simple and taken against a wh used to draw the attention of the viewer towards a certain aspect by maki White space can be used to emphasise text and increase readability.

Events photography

Events are fluid and dynamic occasions where the constant moving and interaction of people can make it a daunting place to be tasked with taking photos. Within these situations the photographer only has a limited amount of chances to take photos!

For this reason preparation is key. Firstly, it is beneficial to first scout the locations where the event – for example, a wedding – will take place.

This will allow the photographer to gain a perspective for the scene and t number of test shots within the area which can save time during the actu

An additional point is to ensure that the exposure and focus are correct fo basic requirement, it can be harder to maintain in a moving environment, speed capable of recording sharp images.

In some situations, particularly with sports photography, it can be necessa tripod and use a lens or camera with a large zoom range due to the varyin and the subject. The tripod also provides another advantage of helping th the camera easily.

Questions:

25. State one benefit of interior studio photo shoots. ***(1 mark)***
26. Suggest one factor that makes event photography difficult. ***(1 mark)***

Task:

Investigate the shutter speed and aperture of a camera. Can you create

Can you utilise shutter speed to make an image blurred or sharp?

Night shots

Low-light photography can prove to be impossible on some cameras that don't allow the user control over changing the exposure settings. Night modes on some compact cameras cause the camera to drastically increase the ISO value in a way that introduces substantial noise to the image.

An

However, with DSLRs the user has the ability to manually adjust the exposure and also record creative photographs using the available light.

For example, when taking photos in low light, compact cameras will the light levels and then adjust the exposure levels based upon

However, on a DSLR, a person could decide on how they want the photo to control the exposure.

One such example is light-trail photography where the low light is used t where visible streaks of light are seen across a photo. This long-exposure use of a long shutter speed.

Task:

Although light-trail photography is best suited at night, it's still possible to low lighting conditions with the right exposure settings.

Using a camera and a torch try to create your own light-trail photograph

It might help if you close the curtains/blinds.

DIGITAL PHOTOGRAPHY TECHNIQUES

Macro mode

Macro photography in simple terms refers to the photographing of objects extremely close up, the aim of which is to produce images where the subject is life-sized or bigger. It is useful for taking images of subjects that are not normally visible to the human eye, such as images of insects.

When the subject is recorded at life-size on the camera it's at a 1:1 magnification ratio, and at half-size it's 1:2 magnification ratio – anything smaller than 1:10 ratio is no longer considered to be macro.

It is possible to shoot macro photography with a zoom lens, although it re length of the lens and how close the camera can get to the subject while

For practical reasons a specialist macro prime lens is usually used, which shoot close and focused images of the subject from a distance, although t a telescopic lens.

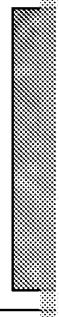
Questions:

27. **What is the minimum magnification ratio to be considered macro pho**

Framing

Framing describes the position of the camera in relation to the subject, ar
within the frame. Different shots are used to give a number of perspective
providing additional insight to the audience.

Type of shot	Description	
Extreme long shot	Shows a large amount of the scene to establish the general location of the action.	
Long shot	This type of shot still contains the scene; however, it gives the audience a more specific location of the action.	
Full shot	Shows the entire height of a person within the frame, allowing the audience to see the subject clearly. It allows the audience to fully see the costumes and the relationship between characters within the setting.	
Medium shot	Contains a view of the character from the waist up. It allows the viewer to see the character's face and body language more clearly. It also allows them to clearly see the interaction with other characters.	
Medium close-up	Includes the face and shoulders of the character. Allows the viewer to see the character's emotions while still being able to see the background.	

Type of shot	Description	
Close-up	A very intimate shot where the background is out of focus. This allows the audience to concentrate on the subject's face, emphasising their facial expressions. When an object is framed in this way it's usually to show detail or an important element.	
Extreme close-up	As the name suggests, it's a very specific part of the character's face. It's used to create an intense mood and draw attention to a specific part of the subject's face.	
Over the shoulder shot	This shot is usually used to show conversation. It allows the audience to see the character's reaction and implies a degree of intimacy between the subjects.	
Point of view shot	This shot aims to be from the view of one of the characters, used in order to make the audience feel as if they are part of the photo.	
Aerial shot	This refers to a shot from above, showing objects such as cars and people below.	

Angle

The angle of the camera in relation to the subject can give additional emo
audience. For example, it can impact how the characters or scene are perc

Task:

Look at worksheet Ⓐ detailing a range of different camera framing shots

Complete any missing sections:

- Name of the shot
- Description
- Audience impact of the shot
- Sketch of the shot

Angle	Description
Wide angle	is a camera lens that encompasses a wide angle of view ually greater than 55°) and a short focal length. It can be used to show a wide landscape and also physical distortion between objects, which is particularly relevant whe close to the photographic subject. For example, in the image to the right the horizon and the flo have become distorted so that straight lines appear curved.
Low angle	The opposite of a high-angle shot, the camera is low and shov the subject from below. It's used to make the subject appear powerful and domineerin as they fill the frame, creating the impression that the viewer a helpless child looking up.
High angle	The camera is positioned up high and looks down at the subje It has the effect of belittling the subject, making them appear if they are a child looking up at an adult.
Eye-level	This is a standard v ng the subject neutrally in a way the audien expect to view it in person.
Canted angle	A canted show is when the camera is tilted on its roll axis so that the horizon is at an angle with the bottom of the frame. It aims to disorientate the viewer and portray emotional tension.

Level

Apart from eye level, a photograph can be taken at either a high or low le
requires a change in the camera angle to adequately refocus upon the sub

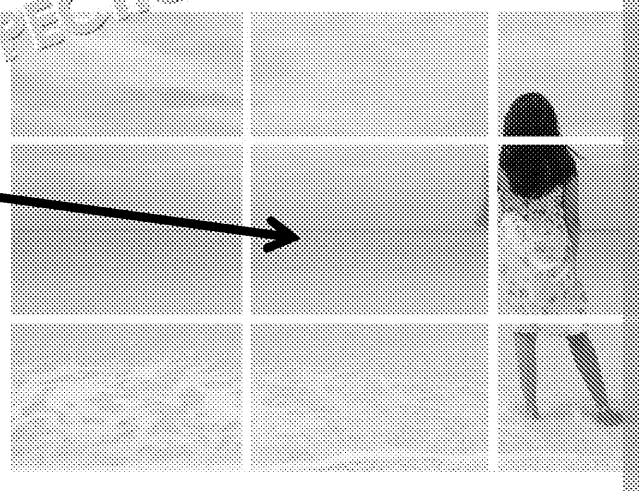
A high or low camera level may at times be necessary to capture an imag
height different to that of the photographer, but it can also be used in orc
different perspective on a scene by changing their viewpoint.

Composition

Composition refers to the way that specific elements within the photo are
layout of the image. It's used to influence the perspective or emotional st
Looking at the image below you can see two examples of image composit
symmetry.

Symmet
balance
been ach
by evenly
distributing
the visual
elements.

This provides
focus to the
centre of the
image.



The rule of thirds is a common yet popular method of composing images,
cameras have the ability to overlay the grid onto the live-view. The horizo
natural horizontal lines of the scene such as the horizon or floor.

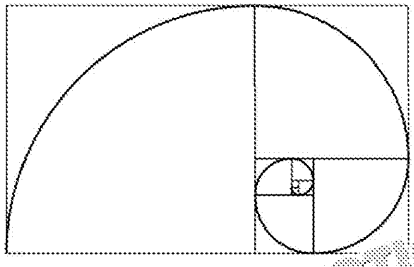
Questions:

28. Define 'composition'. ***(1 mark)***
29. Provide two ways in which the composition of an image can influence

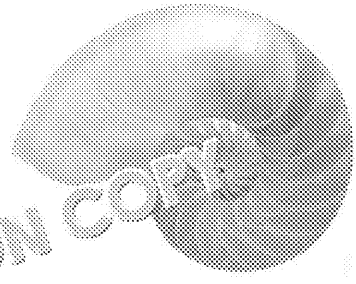
Golden ratio

The golden ratio is another composition design principle based on the rat
from the viewers' perspective. This ratio appears within nature, which cou

There are also numerous examples of art and photographic works over tir
the golden ratio in mind, such as the Mona Lisa and the Last Supper.



The Fibonacci s



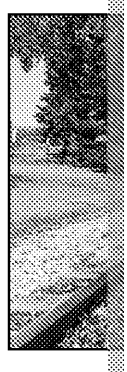
A seashell, an example of the Fibonacci spiral within nature

The Fibonacci spiral is the most well-known method of visualising the go
how a series of diagonal points create a path where elements within the i
aesthetic appeal.

Note how in the image to the right the proportions of the golden ratio are
also aid visibility. The positioning of the children in an identical shape to
gaze of the audience in an identical pattern.

Leading lines

Leading lines are a photography technique where lines are used to guide the view of the audience. Usually they occur with straight lines beginning at the bottom of the image that narrow towards an infinity point where the lines converge in the middle of the image.



Examples of how leading lines can be used:

- By providing a continuous lead from the foreground to the background it can help to create depth and perspective.
- It can lead the viewers to a central subject where the lines conver
importance.

Although leadin[illegible]e commonly found in man-made objects within t
are also[illegible]o[illegible] examples where it could be used within nature – the l
either, ju[illegible]out and experiment!

Positioning

To demonstrate the use of alignment and positioning look at the image on the right. Within this image the old Chinese pavilion has been juxtaposed with the industrial factory in the background to emphasise the difference between and change of the human and natural environment that has occurred over time.

This is further highlighted by the inclusion of trees and shrubbery in the foreground – the photography could be aiming to lead the audience to think about how the pavilion sits within nature while the imposing figure of the factory looms in the background.

Lastly, this image could have been taken by the photographer to display a physical manifestation of a perceived change in Chinese culture philosophy nature is observed as a spiritual and sacred energy force, and with an ever-increasing urban example of human infrastructure.

Frame

Frames are a common concept within photography. This is where natural objects such as arches and holes are used to provide a border or frame to an image. The main focus of using frames is to isolate the subject of the photo and draw the attention of the audience towards the centre.

Looking at the image to the right we can see that the framing gives the audience a degree of context for the subject. The archway suggests that the ruins might have been of a religious building due to the shape commonly being found in religious buildings.

It also helps provide depth to the image and cause the audience to think about what it's obscuring.

Viewpoint

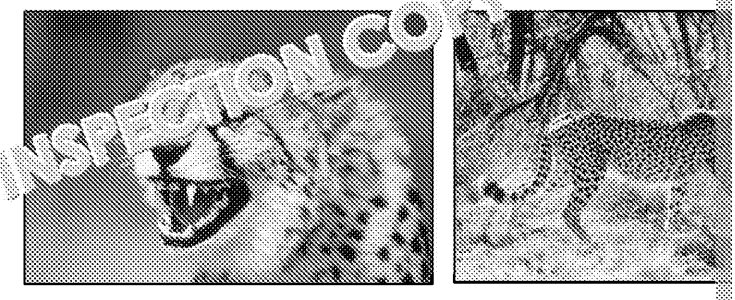
Constantly shooting photos from eye level can sometimes appear boring different viewpoints are used to add creativity and differing perspectives a range of heights and angles that can be used by photographers.

Focus

Within photography depth of field describes the amount of the photo that

A shallow depth of field is when only the subject is in focus, and the back blurred. This can be used to draw the attention of the audience to a speci

A deep depth of field is the opposite; this is when the entire image is in f



Look at the two images above. The one to the left has a very shallow dep appearance of the background. However, in the right-hand one with a dee more detail across the entire image.

Depth of field is controlled by the aperture of a camera. A shallow depth aperture (small f-number), and a deep depth of field by a small aperture (

Zoom

There are two different types of zoom that feature on digital cameras: opt

Optical zoom is where the physical movement of lenses magnifies an ima photographer to gain a closer perspective of the subject without significa the image.

On the other hand, digital zoom is a process whereby the pixels of a secti further focus on an area. This method leads to significant decrease in ima pixellation, where pixels are stretched out to cover a greater area.

Questions:

30. What is the purpose of leading [illegible] photography? ***(2 marks)***
31. What does viewpoint refer to? ***(1 mark)***
32. What is depth of field? ***(1 mark)***
33. What is the difference between optical and digital zoom? ***(4 marks)***

Task:

Now that you've learnt about some of the rules of photography and comp experiment taking photos while keeping these principles and guidelines in

You don't have to copy the shots listed, the aim is to be creative and use about what you want to achieve from the photos, what message you migh audience may feel.

At this moment don't worry about changing the camera settings, keep it set

EXPORTING AND STORING DIGITAL PHOTOG

File transfer

There are a number of different methods by which data can be transferred computer. Most modern digital cameras use SD cards as a standard storag modern laptop computers have inbuilt SD card readers that the user can u without the need of additional equipment or software.

Digital cameras also come with USB data cables that facilitate data transf supported digital devices.

Some smart devices such as mobile phones and other compact cameras a photographic and video footage to the Internet or another device through as Bluetooth and Wi-Fi. This method, therefore, eliminates the need to ph certain circumstances.

Questions:

34. What is the standard storage device used on most digital cameras? (
35. State four ways in which users can upload photos to a computer. ***(4 m***

File formatting

When compressing a photo file it's important to note what the photo will
which it is to be displayed, as that can help decide the choice of which fo

As previously covered, JPEG files are usually small in size and commonly
over digital devices and the web.

TIFF (Tagged Image File Format) is a lossless file format that's commonly
publishing industry, and typically results in large file sizes.

Version control

File organisation is important as it allows files t[illegible]ound easily and avo
deleted on a computer. This is particul[illegible]r[illegible]ant if working within a te
large number of files.

Version control des[illegible]s the process of saving documents in the context
exampl[illegible]fir[illegible]raft of a graphic being saved with 'v1' and following v

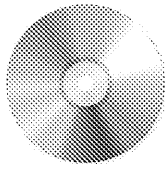
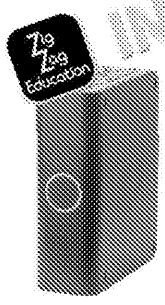
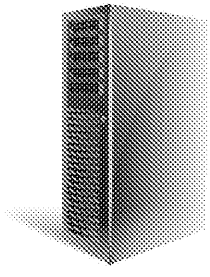
Naming [illegible]makes them significantly easier to locate, and it also allows
within search functions. One method of naming files is by using their description; for example, a photo of a kitten called 'DSCN004.jpg' could b
renamed 'Black_kitten.jpg'

Not only should the image be named properly, but also the folder that contains it. It could be useful to name the folder and image with the current day, month and year as this would identify when the photos were uploaded, such as 'Black_kitten_05042015.jpg' (5th April 2015).

Storage devices

When working with digital files they need to be saved on a memory devic
edited. Most modern devices allow the user to input additional memory b
expandable solutions. Such hardware is necessary when working with a h
RAW files that hold more memory than other conventional file format typ

Storage type	Advantages	
Internal storage This is the memory already within the device.	• Easy and simply to use. • No need for additional hardware or cost.	• Usually c memory • Most DS come wi
SD card 	• Widely s[illegible]p[illegible]rted across [illegible]o[illegible]pnic devices, including variants for mobile phones. • Available in a range of different file sizes and speeds for reading and writing data. • Cheap to purchase.	• Small ar that they

Storage type	Advantages	
DVD 	• Portable and transferrable to other platforms. • Cheap to purchase.	• Slow to re informatio methods. • Standard t • Can be ea the data u • Some new MacBook) • Due to the misplaced
External Hard Drive / USB 	• Data can easily and quickly be read, written and transferred. • Portable and transferrable to other platforms. • Use little power. • Small in size and easy to store. • Available in various storage sizes, e.g. 250 GB, 500 GB, and 1 TB.	• Due to sm misplaced • Can be pro removed f • Can be co size.
Web-based storage 	• Allows data to be shared between connected devices. • Accessible in different locations. • Frees physical storage for other uses and additional files.	• No access network. • Can be ex
PC/Laptop	• Easily accessible for transferring data to other sources.	• Not as eas many othe

Overall it's good practice to save data and files on at least two devices, on and the other as a backup in a suitable accessible location. This helps to s or corruption of files.

Questi

36. What is version control? ***(1 mark)***

37. What is a backup and why are they used? ***(1 mark)***

Task:

Can you think of any disadvantages of using a PC/laptop as a storage s

Aim C: Create digital photographs for a

Objectives:

- ✓ To be able to identify client requirements and develop concepts from a
- ✓ To understand the use of photography techniques and other considerati shoot.
- ✓ To produce digital photographs for a media product.

DEVELOP CONCEPTS FROM A BRIEF

Brief

When producing a movie trailer for a **client**, it's vital that the production has been planned and organised efficiently to ensure the client's wishes have been fulfilled.

In this instance it's useful to create a brief after first discussing the project with the client; this is a short but descriptive account of the task ahead.

In general the brief should be used to inform the photographer exactly what's needed to complete the photo shoot as desired by the client.

- **Objective** – what is the purpose? Where will the photos be displayed?

  The objective is important because certain factors such as the style of photography, post-production editing and composition will be determined by both the subject being photog For example, if photographing a historical item for display in a mu wouldn't likely choose angles and viewpoints that distort the real
- **Target audience** – who are the audience? What are their age, sex,
- **Subject** – what is being photographed and what makes it unique? the photo in terms of the audience reaction? This can help to influ of shot and viewpoint.
- **Scope** – describes the size of a project, in particular any set deadl photos to be produced in time for an exhibition.
- **Budget** – the budget is determined by a range of elements such a and the need to rent any additional equipment. Overall, it will var of each individual shoot.
- **Limitations or restrictions** – any particular ideas that the client lik t duction as a whole.
- **Experimentation** – this refers to creative photographic aspects su to the exposure settings.

Overall, it's essential that the brief is as thorough and appropriate as poss the project to understand the client's requirements. This helps to ensure t organisation are suited to avoid **scope creep**.

Key

- ✓ C t p c

An example of a brief is included below:

Client Information	ZigZag Fabrics is a local seamstress cooperati for the homeless.
Contact	ZigZag Fabrics Gloucester Road Bristol BS1 0AB
Project	A range of male and female modelling shots.
Project Information	They want to open a charity shop and sell som have produced, and want ne modelling sho window and also on
Requirements and Restrictions	Some sh urban locations. t body types of models. Minimal studio shots.
Objecti	Increase publicity, measurable by assessing en website views.
Target Audience	Males and females aged 16+
Key Dates	Deadline: 14th February 2017
Budget	£200 for any additional costs relating to equip
Experimentation	Some shots showing the background environn
Additional Information	Further emphasis on clothes rather than faces

Questions:

38. Why is it important to create a brief? ***(1 mark)***

39. Suggest a scenario that could lead to scope creep. ***(1 mark)***

Task:

You have been tasked with organising a photoshoot to take photos of you facilities. The photos are to be used in an open-d hure for the pub parents.

Using worksheet Ⓑ write a b establish a clear set of requirement include:

- F objective
- A ance and style
- Target audience
- Design constraints
- Details of core content

Ideas development

Upon receiving the design brief, you must analyse, research and develop t
project.

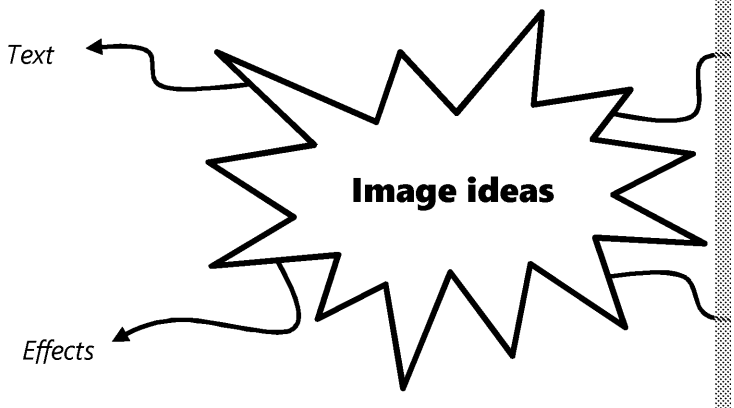
There is no strict method to undertake this process, and it usually starts v
study of the brief to clearly identify the main client requirements.

When working within a team this process allows everyone to cross-exami

Brainstorming describes a process for collecting a large amount of inform
It's an enjoyable and effective group word-association activity that aims t
associated with a key word or idea.

Words are written down, which in turn should generate more words assoc
team each member of the group should contribute.

This app encourages team contribution because it is easy and straig
ideas can be written down which can be drawn out and further explored a



Discussion is another important stage within the development stage that
the client requirements and desires. This could also be part of the process
to discover the overall intended audience impact of the media product.

Task:

Within a group, brainstorm about a promotio al advert for dairy products
comes to mind.

Next create a mind map / storyboard from the strongest ideas.

Has it hel ou visualise an end product?

Current practice

Market and competitor analysis is another method that can be used to de
you look at similar media products and study their strengths and limitatio
method is that it allows you to use the information that has been gathere
your ideas – incorporating and adapting ideas that were successful and ir
less effective in fulfilling its aims.

An additional benefit is that it allows the identification of market trends a
market that could be used for product development and marketing purpo

Review initial ideas

Before going forward to solidify ideas and u[illegible] ta[illegible] the photo shoot it's
ideas. This can be through the use of [illegible] internal and outside scrutiny, w
objective feedback to be gained from outside parties which can then be u

It also a[illegible]tir[illegible] consider alternatives and create contingency plans
changes [illegible] the project.

Lastly, it is a chance to ensure that the idea is truly suited to the client re
important factor of the review and development process.

Trial layout

A trail layout is essentially a mock-up or prototype of the final product wh
how or where the photograph ideas will integrate within the media produ
ample opportunity to reflect upon the ideas and overall design, gain exte
contingency plans for any issues that may arise during the production.

One way in which this could be undertaken would be to sketch or outline
of the media product.

Questions:

40. What is meant by 'client requirements'? *(1 mark)*
41. What are the advantages of reviewing initial ideas? *(2 marks)*
42. What is a trial layout and why is one used? *(2 marks)*

Considerations

In addition to photographic and environmental techniques there are also s
that need to be understood to successful undertake a photo shoot.

- **Subject:** Whether a person or object, the subject of the photograph
prepared for the shoot. This includes visual preparation through th
mental preparation when working with other people.

  Models and other crew members should be informed of the timeta
dramatic intentions for the photos. This will help to ensure that th
other members help to achieve the dram[illegible]ntions.

- **Availability of resource:** By cre[illegible]ork plan, space and time c
ensure that personnel [illegible] and equipment are available for use

- **Booking:** It [illegible]e necessary to book studio space, models and eq
[illegible]n the allocated time. It is important that significant time is
a[illegible]ed to complete the set tasks, while also allowing time for a
occur and cause scope creep.

- **Test shots:** Before the actual shoot the photographer should visit
suitability for the set purpose. During this process some test shots
the photographer to frame the scene and assess any factors that c
the photos.

- **Image resolution:** If stated by the client, then the image resolution
match that of its use. This is to make sure that image quality rema
suffer from pixellation when scaled.

- **ISO:** The relationship between ISO and image noise should always
account when setting up the camera, especially within low-lightin
as noise can have a substantial impact upon perceptions of image
extremely time-consuming process.

- **Location assessment:** Scouting the location prior to the shoot is o
help identify any potential viewpoints, risk and advantages of the
particularly relevant when shooting in exterior locations where we
can be unpredictable. This process is known as a location recce an
sketches/photos of the location that can used in the organisation

A risk assessment is also part of this process. This is a document where pe
details of how to ease the effects of these risks should they occur.

Task:

Using work[illegible]et [illegible] complete a location recce and risk assessmen
interior [illegible]rior location of your choice.

Remember to include factors such as weather, light sources, power su

Digital photography techniques

In addition to the techniques previously outlined, the shutter speed of a camera can be used to show motion within an image as sharp or blurred – portraying motion or a freeze-frame.

For example, in the images shown to the right, the upper photo has been taken with a high shutter speed, displaying the moving water as crisp. In the lower image, the water appears blurred and creates the appearance of being fast-moving.

Within video production this can be used to display motion blur. For example, a moving object can be filmed to appear realistic with an amount of motion blur similar to human vision, or it can be used to disorientate the audience by creating motion trails with a slow shutter speed.

Composition and mise en scène

When thinking about composition and mise en scène, possibly the most in that the choices made are suitable for the brief and fulfil the requirement appropriateness of certain elements such as framing, cropping and angles against the same criteria.

The rules listed within this resource are common important techniques us Composition is of particular importance as it allows you as the photograp the audience think.

Although they are listed as rules this doesn't mean that they need to be f more as common guidelines that you can use. After all, if everyone follow then everyone's photographs would soon become identical. The best met these techniques and your own creative imagination.

Storing

When saving files, they should be in the file format as specified in the clie format on which they will be displayed. You may find it useful to refer to formats detailed earlier (page 11).

Copyright

Most images and photos will be protected by some sort of copyright, meaning that in order to use this image the owner of the copyright will need to give permission.

Generally the creator of the work automatically owns the copyright; however, when an employee creates a piece of work on behalf of their employer the copyright usually rests with the employer. The copyright holder can also assign copyright to another person or allow another person or organisation to license their work.

Where an image has more than one creator then they will all be the copyright owners.

It's important to note that making a copy of a photo or taking a photo of a doesn't give you copyright.

One exception is when an analogue photo is digitised (with permission fr sufficient skill was deemed to have been used to achieve this.

Some photos found online are controlled by libraries that hold copyright rights to the images. These can be subject to additional restrictions that a as restrictions for commercial purposes.

As a digital portfolio is meant to be of your own work, images obtained fr included within a portfolio, nor should any work by you haven't created.

The only exception to this rule is where some post-production editing has in this case it should be clearly noted to the audience.

Within the UK, copyright lasts for the life of the creator plus an additional year of their death, after which it's transferred into the public domain. Implications of copyright infringement vary depending on the circumstan owner.

Consequences can include:

- The user of the photo being asked to buy a licence.
- The owner of the copyright bringing the user to court. This could to use the photo, legal fees and financial compensation.
- The user could even be subject to criminal prosecution if the infri deliberate and on a commercial scale.

Questions:

43. Define 'copyright'. ***(1 mark)***
44. In what circumstance can you use somebody else's work within your p
45. When does a piece of intellectual work transfer into the public dom
46. Which of the following property rights are not awarded automatica

Copyright, Trademark, Patent

Aim D: Review own digital photography fo

Objectives:

- ✓ To be able to select photos for use based upon quality and aesthetic fea
- ✓ To assess the use of technical skills in creating digital photos for a medi
- ✓ To be able to self-evaluate your own photography work.

EDITING

Selecting images from a contact sheet

A contact sheet is the name given to a document that displays the series of photographs taken in a photo shoot. As they are laid out together in series it makes it easy for the photographer to select or reject images based on a comparison with the others taken.

This method of display is useful when there are a large number of photos to look through as it allows you to quickly see which photos have desired qualities.

Contact sheets can also be used to show a client on paper (as opposed to a digital display) the choice of images likely to be used within the media product.

There are a range of important image features that should always be considered when selecting or reviewing photographs. These are:

- **Focus** – unless intended for aesthetic appeal the subject of an image should be sharp and in focus.
- **Exposure** – there shouldn't be any parts of the image that are exc unless intended and justified.
- **Noise** – an indication of poor use of camera skills resulting from a

SELF-EVALUATION

Critical thinking and self-evaluation can be thought of as processes that c reflection, both of which are vital factors in this final stage.

When reviewing a finished project a number of questions are raised in rel design requirements.

Here are examples of a number of questions you could ask yourself when

- Were the aims of the brief?
- Are the final images suited to what the client asked for?
- Is it appropriate for the target audience?
- Is it an acceptable file format for the use and application?
- Is it of acceptable quality?
- Does the composition of the shot relate to the message I'm trying
- Are all the shots properly exposed? Is the lighting suitable?

There should be a clear justification for the selection of photos within a p
of justification should also extend to the composition and exposure of the

The use of analytical and evaluative questions could help to force you to
evidence and reason when referring to your justification.

Examples of analysis questions:

- How...?
- Why...?
- What are the reasons for...?
- What is the relationship between... and...?
- What are the possible solutions to th... s?

Examples of evaluation questi...:

- What are th... ...ages or disadvantages of...?
- ...ar... unclear?
- I... support for my opinion?
- Is... applicable for the project?

It's important to receive outside, creative and unbiased feedback as it pro
alternative perspective. Before showing the client it could also be useful
intended target group and assess their views. This could give the opportu
changes.

It could be useful to note down all the strengths and weaknesses that we
various stages of the project development. The significance of this stage
making similar mistakes and to highlight key strengths, which both benef

You should access your work according to the requirements and guideline
the intended and actual audience response.

Listed below are a number of features that could be considered when self

- Shutter speed
- Aperture
- Focus
- Framing
- Use of mise en scène
- Composition and dramatic intention
- Lighting and exposure

Unit 10: Digital photography for a media produ

For this task you must research, plan, produce and review a series of digit
cover all of the learning outcomes and main tasks included within this gu

Scenario – Music shop

A local music shop has opened a musical workshop within your school tha
aims to help young people learn how to play musical instruments, and
they have a range of instruments that they want to showcase to other
students.

The shop plans to display printed posters around the local area to
advertise the service and also promote online sales of their video lessons.

One of your teachers has recommended you to take a range of photos tha
can be used in the marketing campaign. The workshop wants internal and
external photos of models that can be used to represent a theme of
empowerment and confidence through learning. It also asks that the
photos feature various musical instruments or equipment as an integral
part of each image.

The rest of the idea development has been left to you to decide, requiring
requirements listed above.

At least **six** photos should be produced that demonstrate a variety of style
composition. You must show knowledge of the camera settings and featu

Task 1 – Research

➔ This task covers **Learning Aim A**

Within this task you are required to investigate the reasons that digital ph
media products and how camera settings work.

You then need to select and analyse two different photographs and prese
purpose and use.

Task 2 – Explore

➔ This task covers **Learning Aim B**

You will explore digital photography in different environments and c
similar situations to the scenario you have been set. You must evaluate yo
strengths and limitations of the ideas that underpin the photos you find.

You must remember to produce annotated examples alongside a presenta
your analytical skills.

Task 3 – Plan and Produce

➔ This task covers **Learning Aim C**

In order to complete the task you must first further develop the brief using your own ideas and initiative on how best to improve the brief while taking note of the specific client requirements.
It's recommended that you follow the planning and pre-production guidelines outlined within this guide but you're also free to implement any changes that you see fit.

You must, however, produce the required documentation to show how you planned the production of the photographs.

Finally, you will have to plan and shoot to produce the digital photos, and techniques that you have learnt to complete this task. You have to ensure exported file format relevant for their use by the client.

Task 4 – Review

➔ This task covers **Learning Aim D**

Now that you have finished taking photos you must review the work that

You should assess and consider your work against the technical skills outl that you intended to produce when planning the photos.

Think about the impact that your choices throughout the production had strengths and limitations of your work.

Your thoughts and findings should then be documented in a written appra

Unit 10: Digital photography for a media produc

Learning aim A: Understand the production of digital photography

Mark band	What is needed
Level 2 Distinction	Have you provided evidence of **discussion** and **analysis** about wh photographs are produced in two media products across a range media sectors?
Level 2 Merit	Have you **explained** how digital ca[illegible] are used to produce ph images?
	Have you **exp**[illegible] photographs are produced in two differ
Level 2 Pass	[illegible]you **described** how digital cameras are used to produce pho images?
	Have you **described** the use of photographs in at least two differ products?
Level 1	Have you **outlined** how digital cameras are used to produce phot images?
	Have you **summarised** why photographs are produced in at least different media products?

Learning aim B: Explore techniques of digital photography

Mark band	What is needed
Level 2 Distinction	Have you demonstrated **confident** use of limited digital photogra techniques?
	Have you **analysed** the techniques used in two different types of photography for digital media products?
Level 2 Merit	Have you demonstrated **effective** use of limited digital photogra techniques?
	Have you **explained** the techniques used in t[illegible] different types o photography for digital media prod[illegible]?
Level 2 Pass	Have you demonstrated **ade**[illegible] [illegible]of limited digital photogra techniques?
	Have you [illegible] the techniques used in two different types o [illegible]ography for digital media products?
Level 1	[illegible]you demonstrated **basic** use of limited digital photography techniques?
	Have you **outlined** the techniques used in two different types of photography for digital media products?

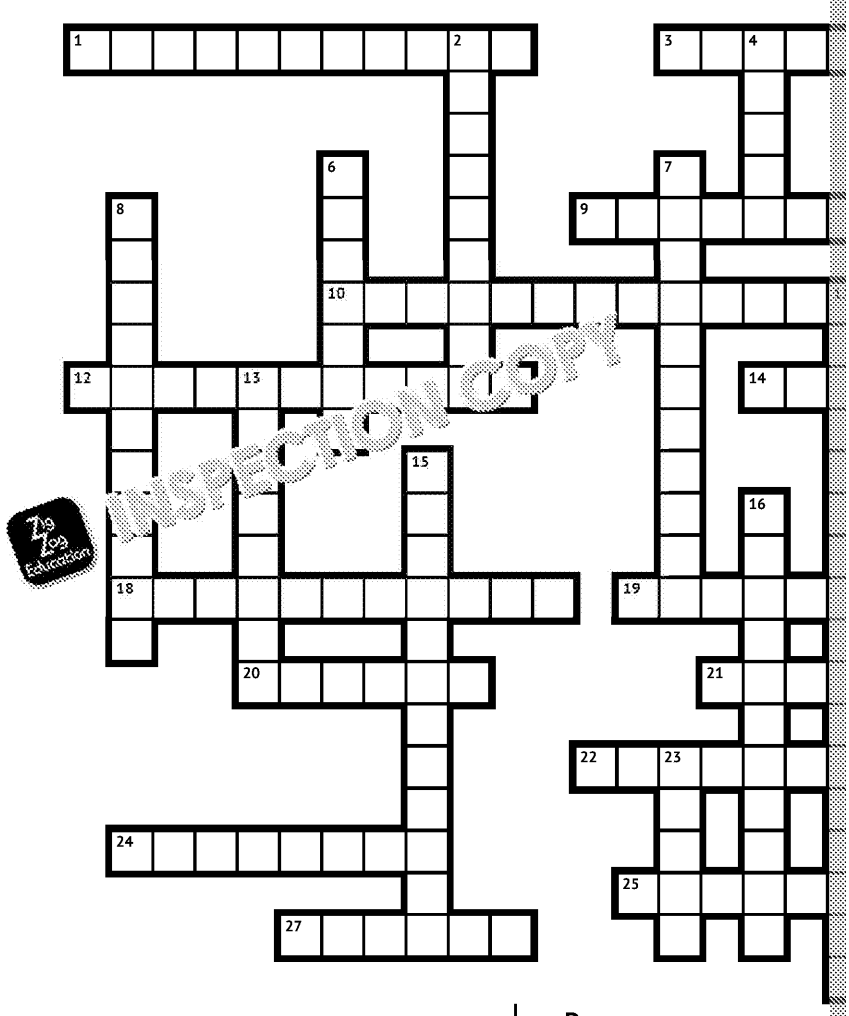
Learning aim C: Create digital photographs for a media product

Mark band	What is needed
Level 2 Distinction	Have you produced **creative** shots in different lighting conditions digital media product that show a confident interpretation of a b
Level 2 Merit	Have you developed a **creative** concept for photographs for a dig product with competent reference to photographic consideration
	Have you produced **effective** interior digital photographs with co lighting for a digital media product that show an appropriate int of the brief?
	Have you produced effective exterior shots for a digital media pr show a competent interpretation of the brief?
Level 2 Pass	Have you developed an **appropriate** concept for photographs for d product with **adequate** reference to photographic conside
	Have you produced **acceptable** interior digital photographs for a product?
	Have you produced **acceptable** exterior shots for a digital media that only show a **suitable** interpretation of the brief?
Level 1	Have you developed a **basic** concept for photographs for a digital product with only **limited** reference to photographic consideratio
	Have you produced **basic** interior digital photographs for a media
	Have you produced **basic** exterior shots for a digital media produ show a **limited** interpretation of the brief?

Learning aim D: Review own digital photography for a media product

Mark band	What is needed
Level 2 Distinction	Have you **evaluated** the technical and creative choices made dur production of your photography, including how these have enabl fulfil the brief?
Level 2 Merit	Have you **analysed** the technical and creative choices within you photography, including how these have enabled you to fulfil the
Level 2 Pass	Have you **explained** your selection and rejection of final photogr intended media product?
	Have you **explained** the technical and creative strengths of your photography?
Level 1	Have you produced a **summary** of the final photographs selected intended media product?
	Have you **summarised** the technical strengths of your digital pho

Unit 10: Digital photography for a media pro



Across

1 The 'coming together' of technologies to create a new device. (11)

3 A type of camera that gives the user limited control over its settings and exposure (point and click). (7)

9 The art of taking and processing photographs. (11)

10 A specific group of people who are the intended viewers or recipients. (6,8)

12 The distance between the centre of a camera lens and its focus, expressed in millimetres (mm). (5,6)

14 An acronym for the type of camera in which the user has full control of its settings and exposure. (4)

18 Portrait or landscape. (11)

19 A type of camera lens in which th… …) the focal length. (4,4)

20 A device th… u… …he amount of light within a scene.

21 A three … mount used to stabilise a camera. (6)

22 The amount of light within a photo, determined by the quantity of light reaching the image sensor. (8)

24 An iris-like opening located within the camera lens that opens and closes to allow light to pass into the camera body. (8)

25 A term used to describe how much detail an image holds. (10)

27 A camera known as being halfway between compact and DSLR. (6)

Down

2 The exclusive legal r… work. (9)

4 A type of photograph… close distance. (5)

5 A compression techn… data from the image.

6 A barn door that part… reaches the camera s…

7 A composition design… 1.618 that is balance…

8 The layout of assets t… as text and images. (…

11 A phrase used to desc… an image. (6,11)

13 A compression techn… without a loss in qual…

15 How much of an ima… aperture setting on a …

16 The process of gainin… without degrading th…

17 The process of defini… colour white in reality

23 A singular square, it i… image. (5)

26 The name of the setti… sensitivity. (3)

Answers

QUESTIONS

1. A bridge camera is one that has the settings and features of both a com

2. One mark given for a correct advantage and one for a correct disadvanta

Advantages	
Easy to take photos and simple to operate.	Lens can't be char
Commonly have some customisation features.	No control over ex

3. One mark for each of the following answer (2 marks)
   - The ability to change the cam[illegible]s.
   - Full user control over th[illegible]are settings.

4. The viewfinder is the [illegible] for the opening on a camera that the photog see th[illegible]e to be taken. (1 mark)

5. One ma[illegible]or each of the following points mentioned: (4 marks)
   - Compact camera has an electronic viewfinder.
   - Compact camera can be seen as an untrue, less accurate representa
   - DSLR viewfinder works through the use of a pentaprism and dichro
   - DSLR viewfinder is the same image that the sensor sees.

6. A zoom lens is a camera lens where the user has the ability to adjust the

7. One mark for each of the following points mentioned: (4 marks)

Lens Type	Advantages	
Zoom	• User can change the focal length and, therefore, the perspective • Takes up less space and reduces the need for a number of lenses	• Lower • Decrea • Smalle
Prime	• Superior image quality • Lighter in weight • Wider aperture and depth of field	• Only o • Usuall

8. A camera sensor is a device that's used to read the amount of light with

9. In a CCD sensor the charge is transferred in columns down the chip and row of the chip, where an analogue to digital converter converts the cha (2 marks)

10. No marks are awarded for the student's opinio[illegible]ich sensor is bette awarded for providing three valid adva[illegible]ta[illegible]es [illegible]three disadvantages f

11. ISO controls the sensitivity [illegible]era sensor. (1 mark)

12. One mark for e[illegible]ect answer: *ISO, shutter speed and aperture*. (3 mar

13. Decrea[illegible] ISO setting and then adjust the shutter speed and aperture in expo[illegible]e. (2 marks)

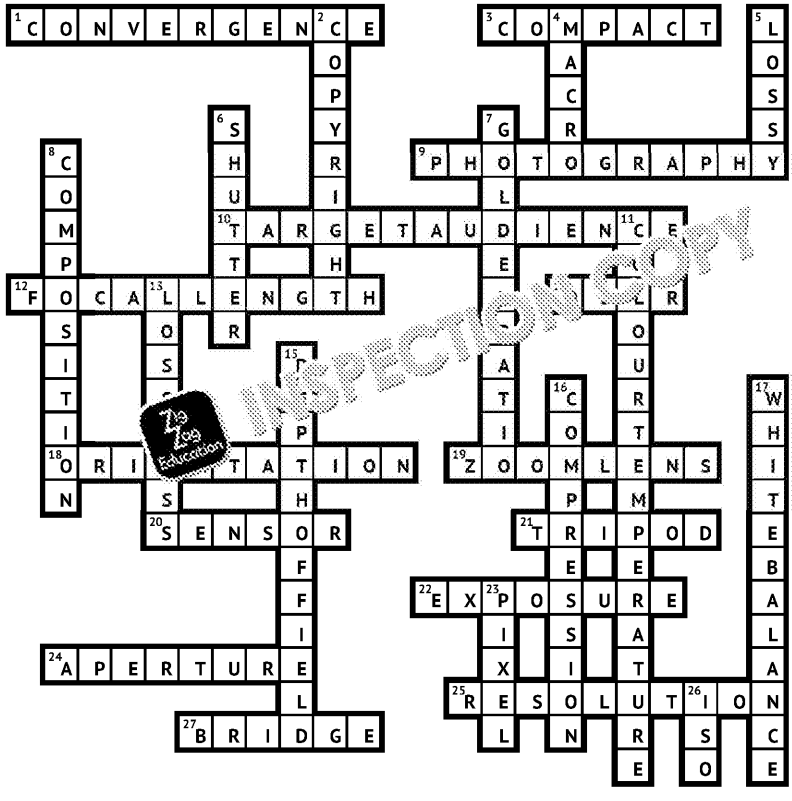
14. The red-eye effect is an abnormality caused when the light of a camera retinas of the photographic subject. Due to the speed of the flash the pu to constrict and restrict the amount of light entering the eye. (2 marks)

15. One mark for each of the following: (2 marks)
   - Fill flash is needed in any circumstance where there are unwanted s photographic subject.
   - Aims to exposure the dark-shadowed areas.

16. White balance controls the camera's interpretation of white depending o within the image. (1 mark)
17. The position of the sun within the sky. (1 mark)
18. Any reasonable risk of damage or loss of quality should be awarded the likelihood of motion blur resulting from camera shake. (1 mark)
19. To stabilise the camera in order to take photo or videos where handheld
20. Mark awarded for one of the following (1 mark):
    - File format choice
    - Image quality setting
    - Image resolution
21. One mark for each of the following points identified: (2 marks)
    - Lossy compression aims to reduce file size by discarding some u
    - Lossless compression aims to reduce file size without any reduction
22. One mark for each of the following: (4 marks)
    - F
    - Exposure
    - Sensor size
    - Lens
23. Mark awarded for any genuine and realistic risk to equipment or crew, s weather conditions. (1 mark)
24. Controllable environmental factors such as lighting. (1 mark)
25. The constant movement of people. (1 mark)
26. 1:10 (1 mark)
27. To allow the photographer to show different perspectives to the audien
28. Composition is defined as the overall design, and the method in which a
29. One mark awarded for each answer: (2 marks)
    - Draw attention to a specific part or element of the image.
    - Initiate an intended thought process.
30. One mark for each of the following: (2 marks)
    - By providing a continuous lead from the foreground to the backgro and perspective.
    - Can lead the viewers to a central subject where the lines converge, importance.
31. Viewpoint refers to the angle and position that the camera is facing to t
32. Depth of field describes the amount of the image that is in focus. (1 mar
33. One mark each for the following (4 marks)
    - Optical zoom is the term given to zoom lenses where the physical movem image is altered.
    - Optical zoom allows the photographer to gain a closer perspective significantly degrading the quality of the image.
    - Digital zoom is a process whereby the pixels of a section of the ima on an area.
    - Digital zoom leads to significant decrease in image quality due to t pixels are stretched out to cover a greater area.
34. SD card (1 mark).

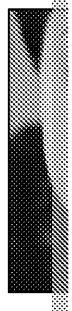
35. One mark for each of the following: (4 marks)
    - Using an SD card reader
    - Using a USB cable
    - Bluetooth
    - Wi-Fi
36. Version control describes the process of saving different versions of a do its development. (1 mark)
37. A backup is a copy of files that is used as a safeguarding tool to ensure is lost, edited or damaged. (1 mark)
38. A brief is important as it allows you to clearly document the wants and n ensuring that the project moves in the right direction and that scope cre
39. One of the following answers (1 mark):
    - Any scenario in which an element of the design is fundamentally ch
    - The delay of a task
40. Client [illegible] are the needs and desires set out by the client with
41. One mark for each of the following answers: (2 marks)
    - Provides the opportunity to gain feedback.
    - Can plan contingencies and consider alternatives.
    - Can check if the idea is suited to the brief and the client's requirem
42. A trial layout aims to show how the final product will look before it's pr developer to gain feedback and make changes. (1 mark)
43. Copyright is an exclusive legal right of the creator to duplicate, license and
44. When you have had an input in its creation. (1 mark)
45. 70 years after the death of the creator. (1 mark)
46. One mark for each of the following: (2 marks)
    - Trademarks
    - Patents

CROSSWORD



Ⓐ **Camera Framing**

Type of shot	Description	
	Shows a large amount of the scene to establish the general location of the action.	
Long shot		
Full shot		
	Contains a view of the character from the waist up, it allows the viewer to see the character's face and body language more clearly. It also allows them to clearly see their interaction with other characters.	
Medium close-up	Includes the face and shoulders of the character. Allows the viewer to see the character's emotions while still being able to see the background.	

Type of shot	Description	
Close-up		
	As the name suggests, this is a very specific part of the character's face. It is used to create an intense mood and draw attention to a specific part of the subject's face.	
Over the shoulder shot		
	This shot aims to be from the view of one of the characters, used in order to make the audience feel as if they are part of the scene.	
		

Ⓑ **Client Brief**

Client Information	
Contact	
Project	
Project Information	
Requirements and Restrictions	
Objective	
Target Audience	
Design Problem	
Key Dates	
Budget	
C	
Additional Information	

© Location Recce

Production title: .....

Crew: .....

Location: .....

Date of shoot: .....

Date of recce: .....

Local condition: • Any known problems? If yes, please detail (including source information)	No ☐ Yes ☐	
• Aid needed? If yes, please detail name, address and contact numbers for each person/organisation • Permission needed? • Protective clothing needed? If yes, please detail	No ☐ Yes ☐ No ☐ Yes ☐ No ☐ Yes ☐	
Shots: • Appropriate shots isolated? • Any obstructions? • Easy to reach and safe?	No ☐ Yes ☐ No ☐ Yes ☐ No ☐ Yes ☐	
Requirements: • Power available? If no, please detail alternative arrangements • Lighting appropriate? If no, please detail alternative arrangements • Sound equipment	No ☐ Yes ☐ No ☐ Yes ☐ No ☐ Yes ☐	
Anticipated problems: • Picture • People • Other?	No ☐ Yes ☐ No ☐ Yes ☐ No ☐ Yes ☐	
Other considerations: • Security considered • Welfare considered (transport, food, first aid, etc.) • Set dressing required • Props required		

Location Details

Location address: .....

Contact name: .....

Telephone no.: .....

Emergency Services

Police: 999 (Emergency)

Hospital: .....

101 ext. (Local)

Power Problems

No. of power outlets: .....

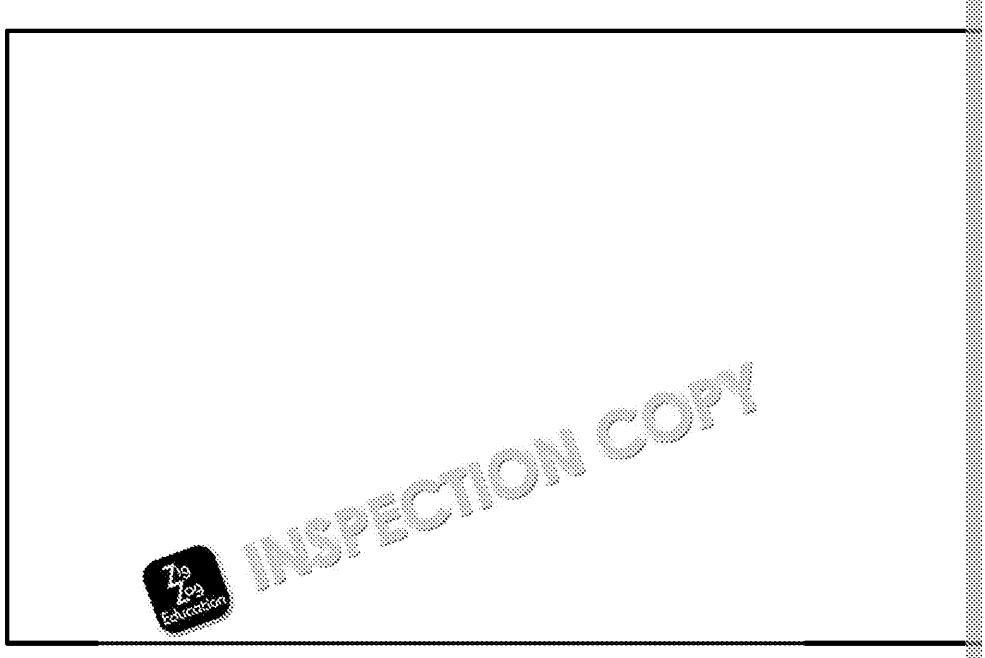
Location of circuit breakers: .....

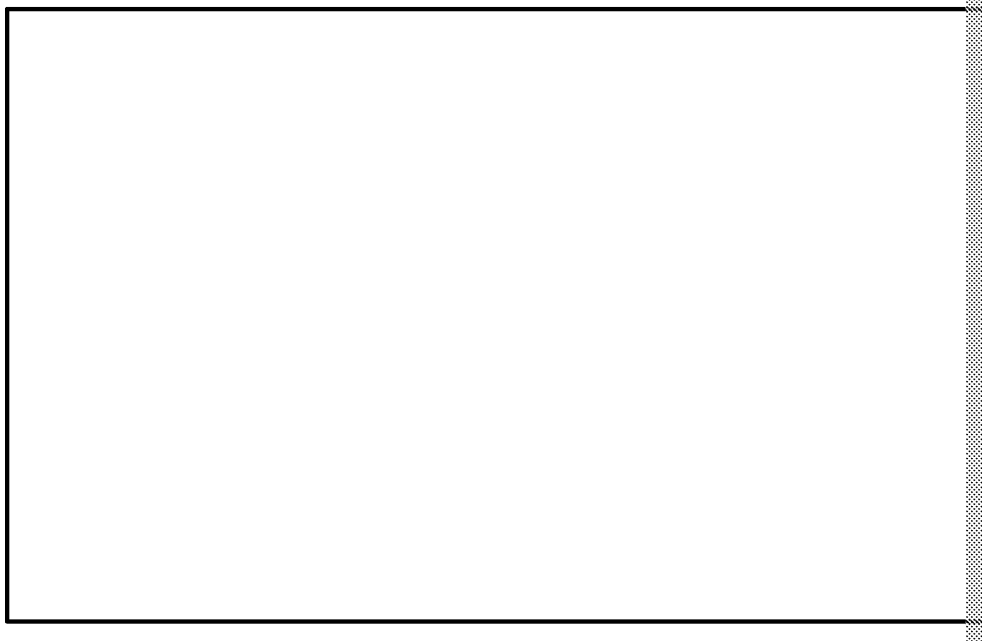
Lighting Details

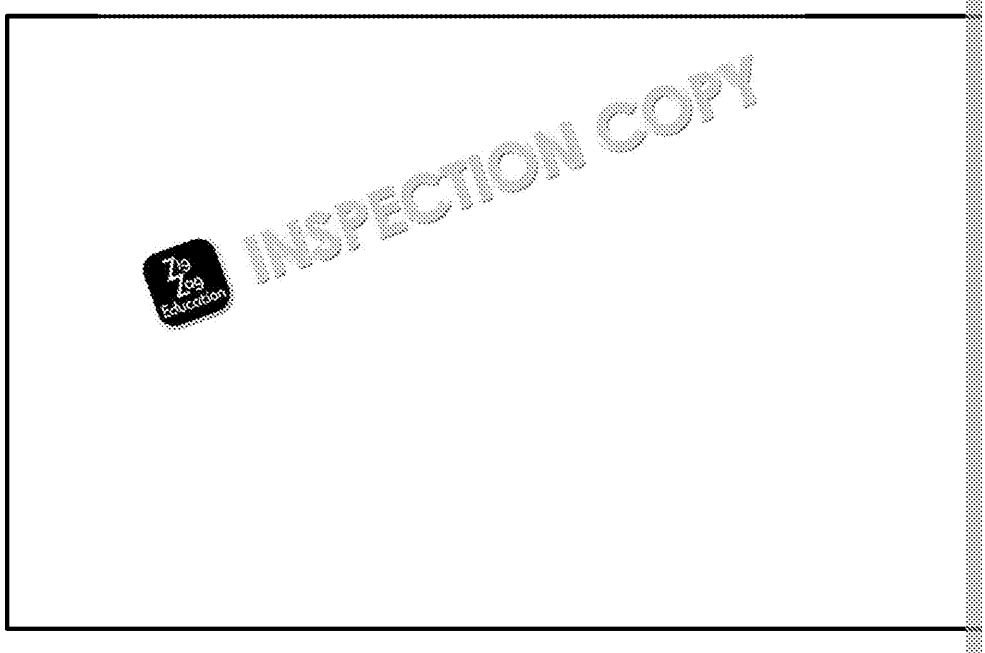
Existing light sources: .....

Additional light required: .....

Location Sketches







Ⓓ Risk Assessment

Production title: .....

Date of shoot: .....

Location: .....

Date of risk assessment: .....

	Persons who may be harmed	Property which may be damaged