The basic purposes of lighting:

Lighting design in theatre goes beyond simply making sure that the audience can see the stage (although this is very important!). Light can be used to establish the time or location of a performance, or to create and enhance mood and atmosphere.

1. **To illuminate** *Light is functional; it allows the audience to see what they need to.*
2. **To add dimension** *Light allows the audience to gauge who is up/down stage, it gives perspective*
3. **To suggest location** *Light can suggest a place, time of day or both without set*
4. **To add atmosphere** *Light adds dramatic atmosphere with colour, intensity & texture*

Design

The Visual & Technical Life of the Production:
Set, Costume, Props, **Light**, Sound**, Multimedia**.

LIGHTING

Lantern type, direction, intensity, gel, gobo, texture, dry ice/smoke, blackouts, gauzes/scrims

MULTI-MEDIA

Animated, stills, integration into set.

Colour, Texture, Focus:

GELS

By inserting a gel (coloured plastic) after the lens of the light, we can change the colour of the light and utilise colour symbolism.

GOBO

Gobos (metal stencils) are inserted before the lens to mould the light into textures or shapes using shadow effects such as crosses or skylines can be created as well as mottled textures like light through trees.

SHUTTER/BARNDOOR

Shutters are attached to the front of the lights and can be used to square the light off; they create crisp lines

LENS

The lens of a light can be moved forwards and backward to create crisp lines or fading outlines for spotlights.

The Two Types of lighting

General

Generally lighting the stage. Composed of a multi directional lighting, for example daylight.

Special Effects

Lighting states that create a specific effect for a specific moment, for example a spotlight.

Directional Lighting

By changing the direction that the light comes to the stage we change its impact:

- **FRONT**
  Actors will appear flat, almost two dimensional. Creates strong shadow on the cyclorama.
- **UP**
  Adds dimension to movement by highlighting it, will spill over the stage and is difficult to control
- **SIDE**
  Outlines the actor's form and creates silhouettes of their figure. Without partial front lighting details obscured
- **BACK**
  Casts shadows over the face and highlights outside form. Light appears to spill over the actor.
- **STRAIGHT DOWN**
  Horror style lighting which casts shadows over the actor. Imagine a torch under your chin.

Creating a lighting effect:

Direction

Consider the direction the light should travel to the stage: how will it make the actors on stage seem?

Colour

Consider the colour of the lights for atmosphere or location: how will colour enhance the scene?

Strength

Consider the intensity of the light (bright to dim); how much light does the scene require?

Focus

Consider the focus the lens of the lights (sharp/loose) or using barn door or shutters to control where the light falls: how much definition does the scene require?

Texture

Consider adding gobo (controlled shadow) to change the texture of the light or to create symbols like skylines or a cross.

Stagecraft: A production is deliberate, everything you experience is carefully chosen

Multimedia

Incredible effects can be achieved through using projections as part of your design. Projections allow a designer to create and change a setting very quickly and can be extremely atmospheric. Projections can work with gauzes. But remember, projections take a lot of work to produce and need to be created early in the rehearsal process to make sure that they are of a suitably high standard.

Smoke and Dry Ice make lighting architectural

Smoke

Smoke is created by evaporating liquid smoke on a heat element in a smoke machine. It will move about freely

Dry Ice

Dry ice is the cold dense white mist produced by solid carbon dioxide in air, used for theatrical effects. It is heavy and will track the floor.

Gauzes or Scrimms

A gauze or scrim is transparent open-mesh gauze of cotton or linen with a stiff finish for use in theatrical curtains. When light is shone behind it you can see anything placed there, but when lit from the front it will appear opaque. Lighting designers use this to make special effects such as a character/place appearing or disappearing. The gauzes are usually flown in from the fly tower.

Lantern	Image of lantern	Description
Fresnel		Named after the French physicist Augustin-Jean Fresnel who contributed to the field of wave optics, the fresnel (pronounced fruh-nel) is a soft-edged spotlight that allows for a variable beam spread. The layered concentric rings on the lens reduce the amount of glass needed to spread the light.
Parcan		Floodlights, Scoops, Strip Lights, Parcan (Parabolic Aluminized Reflector), and Border Lights are all lights that provide a large wash of light but can't be focused. Many of these lights were "borrowed" from the Rock n' Roll world.
Flood		This is the simplest type of lantern, consisting of a lamp and a reflector in a box, with no lens. The reflector concentrates the light towards the opening in the box. There is no control over the focussing of a flood, other than its general direction. Some floods have an asymmetric / directional reflector and are designed to light the cyclorama.
Profile		Profiles produce clearly defined spots of light and are the most versatile of the lanterns. They have a lens (some have two lenses), a lamp and a reflector, and they also have shutters and a gate. Profiles get their name from their ability to project the shape of anything placed in the gate of the lantern between the lamp and the lens.

Videos for revision:

https://www.youtube.com/watch?v=yPSKRv5rRk8&list=PL48EDBCB4915D0ACA&index=13

https://www.youtube.com/watch?v=8CGLetb69pk

https://www.youtube.com/watch?v=uN2kd-TJARU

https://www.youtube.com/watch?v=uY4oNW6s_y0

https://www.youtube.com/watch?v=wqMYsjHU5rU

https://www.youtube.com/watch?v=68Mig6ni0vU

Career Links:

https://www.ucas.com/ucas/after-gcses/find-career-ideas/explore-jobs/job-profile/lighting-technician

https://www.theguardian.com/culture-professionals-network/2015/may/12/how-to-become-a-lighting-designer

https://nationalcareers.service.gov.uk/job-profiles/lighting-technician

https://www.youtube.com/watch?v=Y7iVv4Or-Jk

https://beta.salford.ac.uk/courses/undergraduate/technical-theatre-production-and-design

https://www.ald.org.uk/

Further Reading:

https://filestore.aqa.org.uk/resources/drama/AQA-7262-LD-TG.PDF

https://en.wikipedia.org/wiki/Scrim_(material)

https://www.elliotgriggs.co.uk/

https://www.theguardian.com/stage/2014/feb/04/lighting-design-technology-transforming-dance