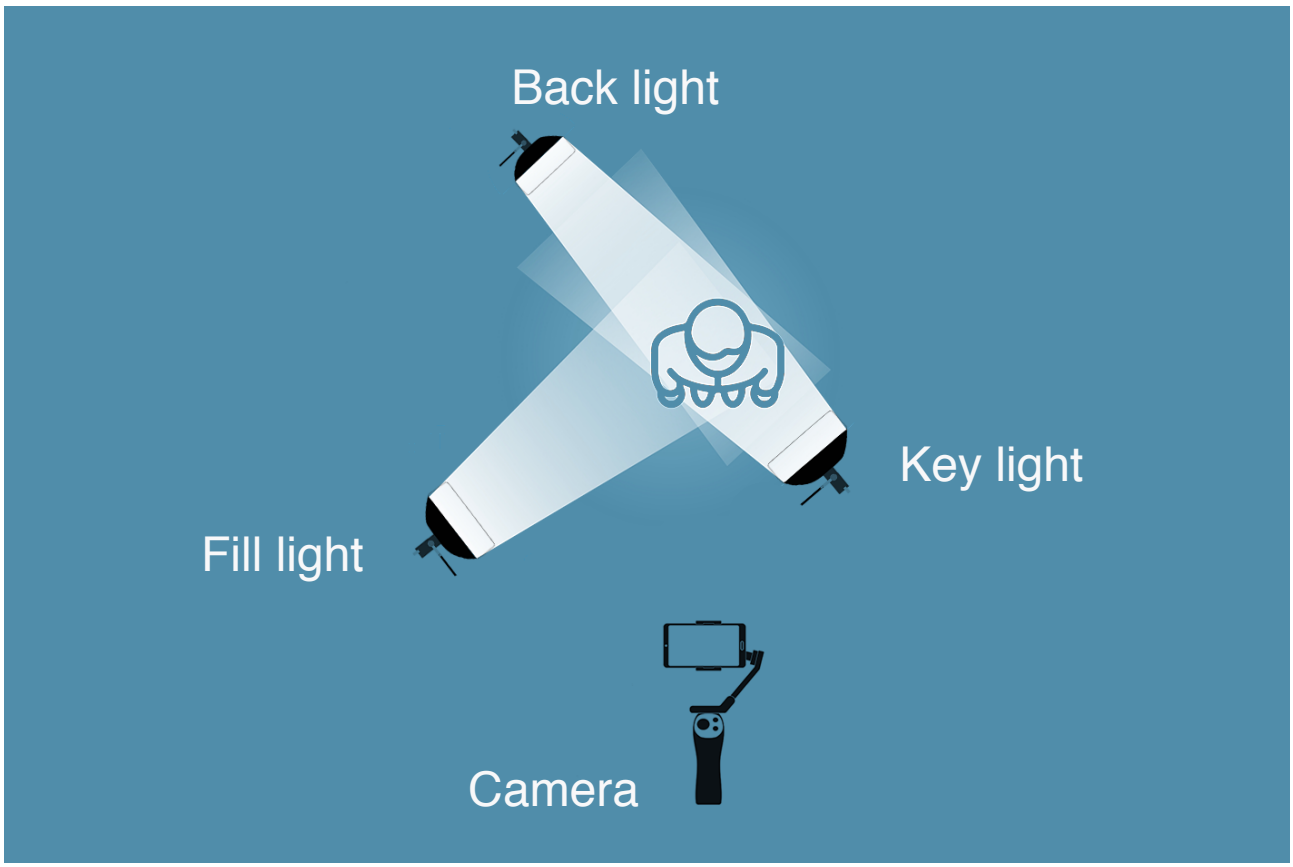
Scene 6
(lighting)
Scene 7: Hotel room (Whyalla)
Mobile
James expec
Felicity on phone to daughter
Insert
Scene 8: Phone on holiday
"Mum we've got the phone. Tell
Photos on phone

lighting

Lighting can make or break your film. It can create or kill a mood or a performance. Lighting can seem very intimidating when you first try to set it up but in this section you will learn a technique that is used in all visual media. It is known as three point lighting.

What is Three Point Lighting?
Three-point lighting is used in theatre, video, film, still photography, computer-generated imagery and 3D computer graphics. It is a simple but versatile system that forms the basis of most lighting. Once you understand three point lighting you are well on the way to understanding all lighting and will inderstand how to adapt it for your film.
This set up uses three lights known as the key light, fill light and back light. Naturally you will need three lights to do this. But understanding the principles will enable you to light your subject using one or two lights.
If you only have one light, it becomes the key.
If you have 2 lights, one is the key and the other is either the fill or the backlight.
The following illustration shows you the basic set up.



Key Light
This is the main light. It is usually the strongest light and has the most influence on the look of the scene. It is placed to one side of the camera/subject so that this side is well lit and the other side has some shadow.

Fill Light
This is the secondary light and is placed on the opposite side of the key light. It is used to fill shadows created by the key. The fill will usually be softer and not as bright as the key. To achieve this, you could move the light further away or use a diffuser. We will look at this in more detail soon.

Back Light
The back light is placed behind the subject and lights it from the rear. Rather than providing direct lighting (like the key and fill), its purpose is to provide definition and subtle highlights around the subject's outlines. This helps separate

the subject from the background by creating a rim of light around the subject. For this reason it is also known as the rim light.
In the equipment section there are a number of lighting recommendations if you can't afford studio lighting. The principles for lighting with each will remain the same.

Hard and Soft Lighting

In film, video, and photography, there are two major categories of light: hard light and soft light. You can work out whether your light source is hard or soft by looking at the shadows. Hard lights will have shadows with very sharp edges, whereas soft light will have shadows with soft edges or no defined edges at all.
The thing that makes a light either soft or hard is the relative size of the light source. A small source will be much harsher than a larger source. The best example of this is the sky. On a bright and sunny day, your shadows will be incredibly sharp because the light source that illuminates the subject (the Sun) is relatively very small in the sky.
Contrast a sunny day with a cloudy day. On an overcast day, you no longer have a strong single point light source illuminating your subject, rather the light is diffused across the entire sky. Such conditions produce very soft shadows.

Why Soft Lighting?

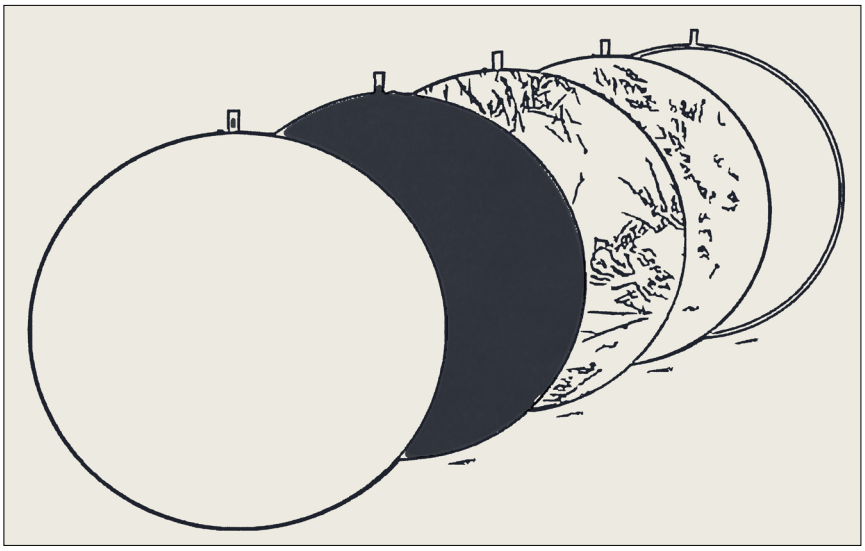
While one type of light source is not better than the other, hard and soft lights can create very different moods. Soft light is also easier to work with than hard light.
There are a number of reasons for this.
First, soft light doesn't create sharp shadows in the way that hard light does.
By nature, our eyes are drawn to high contrast. If you're us

ing hard lights, the viewer's eyes may be drawn to points in the frame other than your subject.
Soft light also helps make your subject look as good as possible by minimising wrinkles and blemishes.

How can you achieve soft shadows on set?

1. Diffusion Paper
Diffusion paper is a translucent paper that is a great option if you want to soften your lighting. It limits the amount of light if you place it between the light and the subject. The "paper" is usually clamped to the barn doors of a light. The result isn't dramatic, but it is subtle enough to soften the shadows.
You can use wax paper or baking paper instead of diffusion paper to get a similar effect. These papers that are readily available from the supermarket will work with LED lights but shouldn't be used with a tungsten light as they could catch fire.

2. Reflector
There will be times when on location you will only have natural light to work with. Other times the lights you have available are too bright and need some diffusion. A 5-in-1 reflector can be a great tool to help tackle these issues.



i. As a Key Light

As mentioned earlier the key light is your primary light. It clearly highlights the form of your subject. Now, if you find yourself on location with nothing but natural light, you can use a reflector instead of a key light. Place your talent with their backs to the sun. Then use the reflector to bounce the sunlight onto their face.

ii. As a Diffuser

At times you'll find that you may have too much light. In this case you'll want to diffuse that light so that your subject isn't harshly lit.

If you're working on location using natural light you can use the translucent side of a 5-in-1 reflector and place it between your subject and the sun to diffuse it. This will cast smooth light on your subject rather than the harsh light that you would have without it.

iii. To add Shadow

You can also use the your reflector as a shader because at times you will have too much reflected light and you may want more shadow. Place the black panel of your 5-in-1 reflector between the reflective light source and the subject to achieve an even shadow opposite the key light.

iv. To create Rim Light

You can position the reflector to redirect light from one of your lights, particularly the stronger key light, if you only have two lights, to illuminate the back of the head to create a rim light.

Green screen
Green screen allows you to shoot actors and objects and insert backgrounds behind them at a later date. You can film someone inside but then take the action outside. You can place them somewhere else altogether. There are many such shots in **'Phone Home'** which was filmed in the middle of a pandemic where it was not possible to shoot on location. We also had trouble finding a flying bus so green screen had to do.
We have placed this subject in the 'Lighting' section because much of green screen success depends on effective lighting, building on what you have learnt in this section.

The still below from the **'Phone Home'** flying bus sequence involved two images shot in front of a green screen.
(4:22 - 5:22)

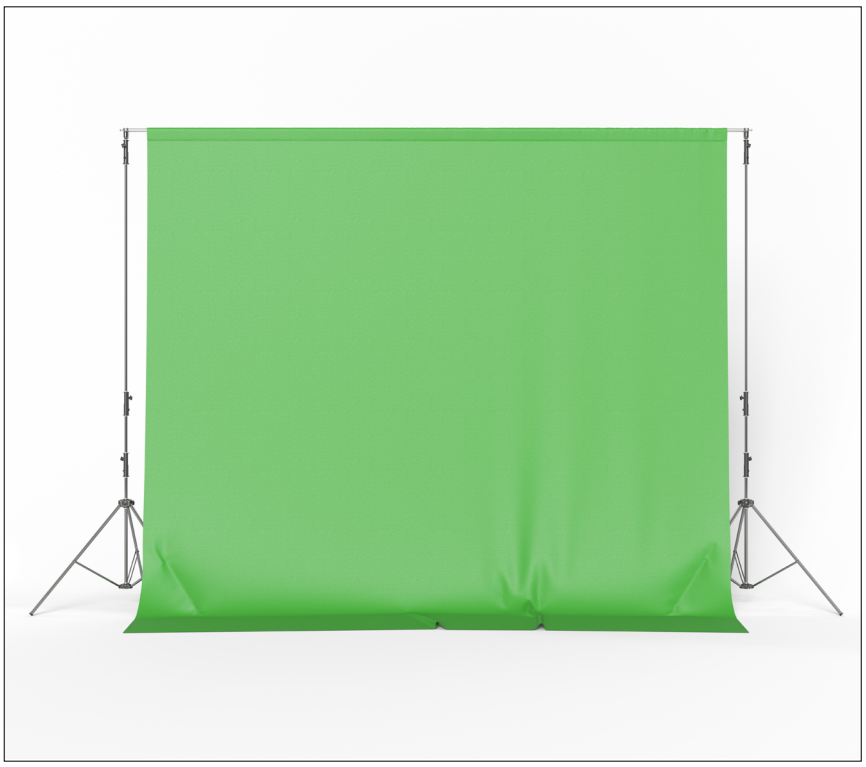
https://www.youtube.com/watch?v=CX-ghh-LIIt4&list=PL3PLBv5OrbIpuYhim35XKkIzwhbiBGe-y_&index=2

Below are the two green screen images shot for the scene before they were edited.

Step 1: Build your Green Screen

We will look at two ways to create a green screen. The first is the use of chroma key paint. It can be purchased online and is great for a static, front on, medium shot. The draw back is that you will have to paint a wall. If you have a permanent place set up for shoots this is a great option. The second involves using a piece of fabric suspended on a frame or taped to a wall. This is what was used for **'Phone Home'**. James and his father taped a lime green sheet to a large flat wall.

You can also purchase a green screen frame and suspend your cloth or paper green screen as pictured below.



What's great about the material option is that your green screen is now portable which gives you the ability to shoot green screen in different locations.

A blue screen might be the choice when you are filming foliage or green plants, or when your subject has light blonde or even white hair.
Whether you use green or blue screen make sure that you have a big enough area for the action required. If you're shooting an action scene, you should use a much larger green screen sheet.
This is so important because if the actor or object overlaps the edge of the green screen they will look "cut off" in post production.
When using a wide shot in which the actor's entire body appears in the shot you will need to cover the floor around them. If you buy a sheet set, you can use one on the wall

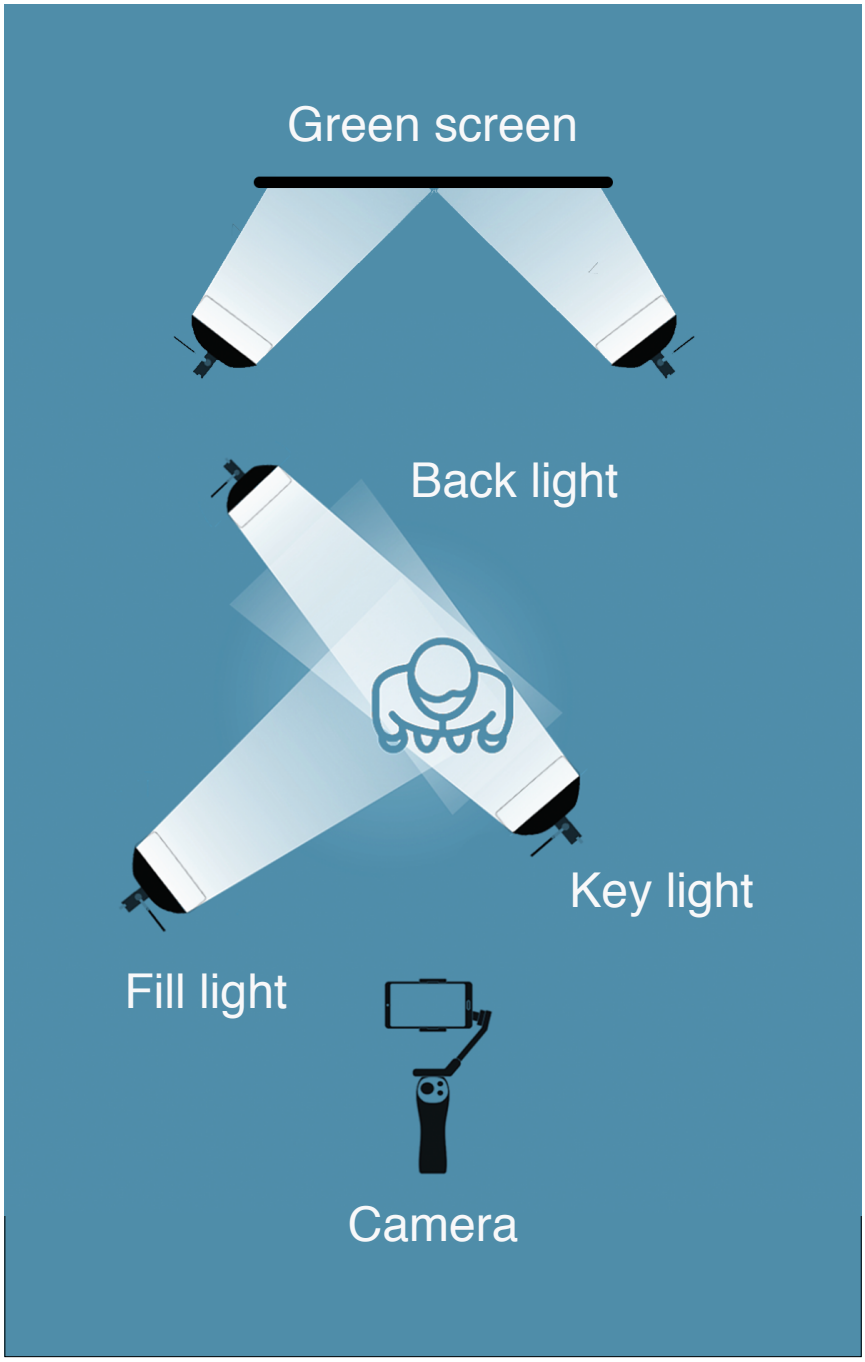
or frame and one on the floor. It is important to stretch the sheets flat using gaffer tape to minimise wrinkles that cast deep shadows and are quite difficult to edit out in post production.

Step 2: Light Your Green Screen

Good lighting is critical when using a green screen to create an even colour and eliminate shadows.This makes the editing process a lot easier.
When lighting your green screen, a major issue is to avoid “green spill”. This happens when the colour of your screen taints everything around it with a green glow including your actors or objects.
The number one way to avoid this is to make sure you light both the screen and actor or object correctly.
When lighting the backdrop, your goal is to not only illuminate the screen but also reduce shadows and wrinkles. To light the backdrop, use two lights that are positioned at different angles, each a couple of feet from the screen about half-way up the screen. If you choose to go with a pull-up screen, collapsible backdrop or simply to paint the wall, getting rid of wrinkles won’t be a major issue, but you’ll still want to illuminate the backdrop as brightly as you can.
Once your backdrop is lit, it’s time to light your subject. If you can, use three separate lights; a key light, fill light and backlight. Your key light is the most prominent because it casts the most light on your subject.
Your fill light is softer and placed at an angle opposite to the key light. Its purpose is to fill the shadows caused by the key light. And finally, the blacklight helps to illuminate the edges of the performer. This is vital when using a green screen as it helps to clearly separate the subject from the backdrop.

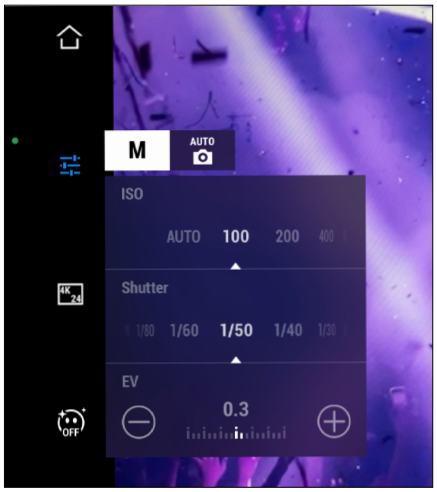
Make sure that your lighting is also consistent with the background you use. You need to create similar lighting effects on your actor or object as is found in the background photo or footage. For example if the light is coming from the right hand side in the background photo/footage you need to key light your subject from the right hand side.

The image below illustrates the ideal set up.

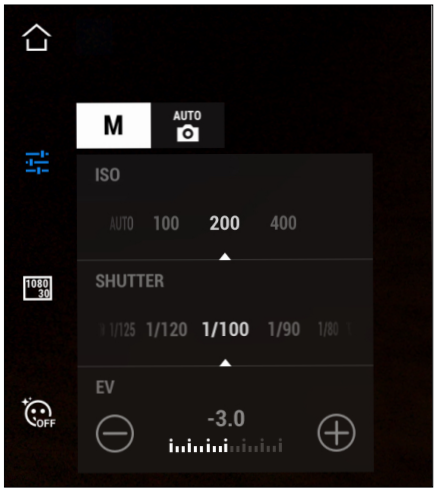


Step 3: Filming in front of a green screen

As with regular camera videography, try to avoid high ISO as you want to get the cleanest image possible without a lot of noise. Set it at 100. You'll want to set your shutter speed as you normally would, 1/50. These setting will be fine for fairly static poses.



If your actors are making quick movements, up your shutter speed to 1/100 and your ISO to 200. The higher shutter speed will minimise blur but your picture may be a bit more noisy or grainy.Try not to go above ISO 200 when you are shooting inside.



Now that you're camera is set up, here's some tips when shooting with a green screen.
First of all make sure your subjects aren't wearing any green. Those green items will also disappear when you edit the clips!
Actors should not be wear reflective jewellery or glossy makeup that may attract green spill.
When working with a green screen, it's essential that you know what action will take place and choreograph it perfectly so your performers are interacting with the background elements as they happen.

Step 4: Edit your green screen footage

You will find a step by step guide for this at the end of the 'Editing' section.