

Light and Colour

	Equipment	Time
Introduction Greet children as they arrive and give them a name tag for themselves and their adult. The children sit with their adult to work together. Introduce self. Set the scene.	Name Tags, Texta, Photo Release Forms, Hand Sanitiser	
What are we doing today? Today we will be learning about light and colour. Have you ever thought about how you see? Why can't you see very well in the dark, or if someone covers your eyes? We see when light comes into our eyes. If there is no light, we cannot see. The way light touches or passes through things can change how it appears when it enters our eyes. This how we see light & dark and shadows. It is also how we see different colours.	Plastic Tablecloth	5 mins
Task 1 – Looking at Colours Using the coloured counters hold up each counter and get the children to tell you what colour it is. Colour sorting – get the children to group a collection of items into different colour groups. Talk about how Red, Yellow and Blue are called Primary colours and when we mix these colours we can create different colours like Green, Orange and Purple. Use the colour mixing glasses – try the different coloured lenses and look at the different coloured counters. How do the items change colour?	Parachute Coloured Counters Coloured Droppers Coloured Bowls Individual Boxes Felt board and coloured pictures Coloured scarves Coloured bean bags	10 mins

Task 2 – Colour Mixing with Torches Set up whiteboard in a dark space. Put duplo figure in front of whiteboard. Use the 3 torches with each torch covered with a different colour cellophane. Shine the torches onto the duplo figure and see the shadows formed and the colours mixing. A shadow is created when an opaque material or object is placed in front of a light source and prevents the light from passing through. It creates a dark area on a surface as a result. We can also see the different colour lights projected onto the whiteboard. When we mix the 2 colours we can see another colour forming.	Whiteboard Torches with cellophane Duplo	10 mins
Task 3 – Cutting White Light with CD's. Using sunlight or a torch, shine it onto a cd to try and create a rainbow on the whiteboard. Use the rainbow glasses to check out the lights and rainbows.	CD's Whiteboard Torches Rainbow Glasses	10 mins
Task 4 – Plasma Ball & Globe Setup and demonstrate the Plasma Ball. Let the children have a go at moving the light. Bottled Lightning – inside the globe are charged particles and gases, like those found in coloured neon lights, that	Power Plasma Ball Globe	5 mins

light up as the particles pass through them. The charged particles are trying to reach the ground (earth). When you touch the globe, you provide an easy path to the ground and so the arcs are attracted to your finger. Likewise, they are attracted to the Fluoro tube you are holding and as they are a moving electric current, the tube starts to glow.		
Task 5 – Free Play Exploration with Items in the Spark Boxes Check out the bug eye viewer – not all animals see the same way as us. When we look at something our two eyes nearly always move together. A chameleon can move its eyes in any direction. How many different versions of things can you see? Have another go at the colour mixing glasses – Looking through the tiny squares on the clear lenses is a bit like seeing through the eyes of an insect. What we see as a big eye on an insect is really many, many small eyes working together. That is why it is so hard to catch an insect with your hands. Find the Looky Periscope in the Discovery Box? Can you see behind you? What is in in that lets the light move around the wall?	Individual Spark Boxes	10 mins

Task 6 – Colour Predictions Have containers with coloured water ie. Blue, Yellow, Red Get the children to make a prediction as to what colour we will create if we add another colour to it.	Food Colouring Red, Blue & Yellow Water Jars Pipettes Trays?	10 mins
Task 7 – Tie-Dye Towels Spread out the paper towel for each participant. Using jars filled with food dye and water, use the pipettes to create a masterpiece. Try folding your paper towel first before you colour it. What kinds of patterns can you make? Are the colours mixing? What new colours have you made?	Food Colouring Red, Blue & Yellow Water Jars Pipettes Paper Towel	10 mins
Mat Time – Read the book “Lights Day and Night”. I hope you had fun today exploring light and colour. We learnt that we could make colours just from mixing the primary colours red, blue, and yellow. Next week in our final session we will be getting musical as we explore Sound.	Book Stickers	5 mins

