WARNING!

NOT SUITABLE FOR CHILDREN UNDER 8 YEARS. FOR USE UNDER ADULT SUPERVISION.
CONTAINS SOME CHEMICALS WHICH PRESENT A HAZARD TO HEALTH.
READ THE INSTRUCTIONS BEFORE USE, FOLLOW THEM AND KEEP THEM FOR REFERENCE.
DO NOT ALLOW CHEMICALS TO COME INTO CONTACT WITH ANY PART OF THE BODY,
PARTICULARLY THE MOUTH AND EYES.
KEEP SMALL CHILDREN AND ANIMALS AWAY FROM THESE EXPERIMENTS.
KEEP THIS EXPERIMENTAL SET OUT OF REACH OF CHILDREN UNDER 8 YEARS OLD.
EYE PROTECTION FOR SUPERVISING ADULTS IS NOT INCLUDED.
DO NOT INHALE DUST OR POWDER.
IN CASE OF EYE CONTACT: WASH OUT EYE WITH PLENTY OF WATER, HOLDING EYE OPEN.
SEEK IMMEDIATE MEDICAL ADVICE.
IF SWALLOWED: WASH OUT MOUTH WITH WATER, DRINK SOME FRESH WATER. DO NOT
INDUCE VOMITING. SEEK IMMEDIATE MEDICAL ADVICE.
SOME COMPONENTS REQUIRE HEATING IN A MICROWAVE – A RESPONSIBLE ADULT MUST
PERFORM THIS TASK.
ADVICE FOR SUPERVISING ADULTS

• Read and follow these instructions, the safety rules and the first aid information, and keep them for reference.
• The incorrect use of chemicals can cause injury and damage to health. Only carry out those activities which are listed in the instructions.
• This chemical toy is not suitable for children under 8 years. For use under adult supervision. Keep this chemical toy out of reach of children under 8 years old.
• Because children’s abilities vary so much, even within age groups, supervising adults should exercise discretion as to which activities are suitable and safe for them. The instructions should enable supervisors to assess any activity to establish its suitability for a particular child.
• The supervising adult should discuss the warnings, safety information and possible hazards with the child or children before commencing the activities. Particular attention should be paid to handling acids, alkalis, hot liquids including those heated in a microwave.
• The area surrounding the experiment should be kept clear of any obstructions and away from the storage of food. It should be well lit and ventilated and close to a water supply. A solid table with a heat resistant top should be provided.
• If any experiment starts to grow mould, dispose of it immediately in household waste and wash your hands.
• Some items in the kit can stain clothing and furniture. Cover the activity area with newspaper to avoid damage.
• Undiluted/unmixed ingredients may irritate skin.
• The working area should be cleaned immediately after carrying out the activities.

FIRST AID INFORMATION

• In case of eye contact: Wash out eye with plenty of water, holding eye open if necessary. Seek immediate medical advice.
• If swallowed: Wash out mouth with water, drink some fresh water. Do not induce vomiting. Seek immediate medical advice.
• In case of inhalation: Remove person to fresh air.
• In case of skin contact, burns or irritation: Wash affected area with plenty of water for at least 10 minutes.
• In case of doubt, seek medical advice without delay. Take the chemical, its container and this leaflet with you.
• In case of injury always seek medical advice.
• Write in the box below the telephone number of your nearest hospital that can be reached in an emergency.

SAFETY RULES

• Read these instructions before use, follow them and keep them for reference.
• Keep younger children under the specified age limit, animals and those not wearing eye protection away from the activity area.
• Always wear eye protection.
• Do not inhale dust or powder.
• Do not place the Plaster of Paris material in the mouth.
• Do not apply the Plaster of Paris material onto the body.
• Store this experimental set out of reach of children under 8 years of age.
• Clean all equipment after use.
• Make sure that all containers are fully closed and properly stored after use.
• Ensure that all empty containers and/or non-reclosable containers are disposed of properly.
• Wash hands after carrying out activities.
• Ensure that during the growing of crystals, the container with the liquid is out of reach of children under 8 years.
• Do not grow crystals where food or drink is handled, or in bedrooms.
• Do not place foodstuffs in original containers. Dispose of immediately.
• Do not use any equipment which has not been supplied with the set or recommended in the instructions for use.
• Do not eat or drink in the experimental area.
• Dispose of all components in household waste unless otherwise stated in the instructions.
**What Are Neon Colours?**

Maybe a better name for neon colours should be “fluorescents”. Fluorescent colours appear unnaturally bright because they contain pigments which are made up of molecules that are very efficient at absorbing high frequency Ultra Violet (UV) light. We can’t see UV light, but fluorescent colours convert UV light into lower frequency light which we can see. This is the principle behind those detergents that make clothes look super-bright white and also why printer paper sometimes looks blindingly white. Your eye expects what the brightest something can be is if all the ambient (visible) light is reflected back, but by sneaking in extra energy from converting the UV, the end result is that there is actually more light from those colours hitting your eyes, so they seem brighter.

**Safety First**

These kits are completely safe when used in the way we describe in the instruction leaflet. Always read the instructions before starting and ask for adult help when requested. If you experience any signs of irritation, rash or reaction, discontinue use immediately.

If any of your projects start to look, feel or smell strange, grow mould, pink stuff, purple stuff, or any other “stuff”, throw them away. When in doubt….throw it out!!
EXPERIMENT 1. NEON NAILS
Some facts about nails:

Women wearing long artificial nails dates back to Ancient Egypt and also crops up during the Ming Dynasty in China and the 19th century in Greece. The false nails we see today were invented in the mid-20th century. As with many things we're familiar with, their creation came about by accident.

American dentist Fred Slack broke a nail while at work in 1954 and used materials at his disposal to make a temporary replacement with impressive results. After perfecting the unintentional invention he started the first acrylic nails company with his brother.

Let's Make Your Sparkly Neon Nails:

Items you will need which are not included in the kit: mixing container and a cocktail stick.

1. Pour 3 level scoops of Fairy Goo and 3 scoops of cold tap water into a mixing container.
2. Mix really well with the Wooden Stick.
3. Pour this mixture into the Heart-Shaped Nail Mould (Image 1) and give the Mould a shake from side to side to evenly distribute the Goo.
4. Give each of the Neon Gel Paints a good shake and squeeze 5 to 10 drops of each colour onto the surface of the Goo (Image 2).
5. Use a cocktail stick to swirl patterns in the Goo (Image 3).
6. If any area lacks colour, add more paint drops and swirl again.
7. At this stage you can either sprinkle some of the Sparkle Dust Glitter onto the surface of the Goo for a scattered glitter effect over the Fingernails, or you can leave out this step and follow the “additional decoration option” instruction after step 10 below to give your nails glitter tips instead.
8. Holding the legs on the back of the False Fingernails, gently dip the front side of the nails onto the surface of the Goo (Image 4).
9. Leave for 5 minutes, then keeping the False Fingernails flat, slowly lift them up until they are clear of the Goo.
10. Slot the legs of the Fingernails into the holes in the Nail Mould to dry.

Additional decoration option:

1. Dip the tip of each of your decorated False Fingernail about 5mm into a scoop of the Fairy Goo (Image 5).
2. Pull the fingernail out and dip the sticky end into the Sparkle Dust Glitter.
3. Leave to dry.

Attaching the nails:

Remove the decorated nails from the plastic support. Peel off a Double Sided Nail Sticker and stick it to your nail, then press the false nail on top.

Did You Know:

Nails grow at a rate of around 1cm every 100 days. Fingernails grow about three times faster than toenails. The nails of our middle fingers grow the fastest while our thumb nails are the slowest. Nails grow quicker in summer and hotter conditions. They also grow faster during the day than at night. It is just a myth that nails continue to grow after a person dies. It is thought men’s nails grow quicker than women’s. Fingernails will grow faster on your more dominant hand – the hand you write with.

What's happening in this experiment? The Fairy Goo is made from a form of seaweed called Sodium Alginate. When this is added to a liquid such as water which contains calcium ions, the chemical reaction will create a gel, thickening the water. This is because the calcium ions insert themselves between individual alginate strands and will allow them to interlock and form a gel. This gel allows the Neon Paint to rest on the surface, ready for transfer onto the Fingernails.
EXPERIMENT 2. GLITTERY, GLOWING NEON NIGHT JAR

A glowing night jar is a unique way to add a little light to your bedroom. Adding a sprinkle of sparkle dust glitter makes this experiment even more magical.

To Make Your Glowing Night Jar:

Items you will need which are not included in the kit: a measuring jug and an empty water bottle with lid.

1. Pour 240ml of cold tap water into an empty plastic water bottle.
2. Add a few drops of the Neon Glow Ink.
3. Add 3 scoops of the Fairy Goo and 1 scoop of the Sparkle Dust Glitter.
4. Screw on the bottle lid and give your mixture a really good shake to make sure the water and Fairy Goo mix together to form a gel.
5. Leave for 2 hours.
6. After 2 hours, give the bottle a final shake and pour the mixture into the Night Light Jar.
7. Decorate the outside of the jar with the Stickers.
8. Place the UV Light Unit on top (Image 6).
9. Take into a dark room, turn on the switch and see the magical light effects.

The Light Spectrum

The UV Light Unit in this kit has 3 LED bulbs, which emit UV light. The Neon Ink contains phosphors. A phosphor is a substance which emits visible light in response to being exposed to certain other frequencies of light. In other words, the phosphors in the Neon Ink convert the UV light emitted by the LEDs into visible light which is what we see glowing brightly.

What’s happening in this experiment? Our eyes can only see the visible spectrum of light: red, though orange, yellow, green, blue and violet. Above violet is what is known as ultra violet light. Like in the Neon Nails experiment, the Fairy Goo helps the Neon Ink coloured water form into a gel which is how the Fairy Dust Glitter gets trapped between the molecules and appears to be suspended in the water.
EXPERIMENT 3. LIGHT-UP CRYSTAL FAIRY

Fairies normally only come out at night after everyone is asleep.

Once you have made this crystal winged fairy model and fairy door, find a special place to put it.

Leave the light on to attract real fairies. If the light has gone out by morning, they have moved in.

This experiment takes a little time to finish, so like all good experiments, you will need a little patience, but it will be worth it in the end.

Making Your Fairy Wings - Stage 1:

Items you will need which are not included in the kit: a sandwich bag, a mixing container, a spoon, a rolling pin.

1. Place 1 scoop of Fairy Crystals in a sandwich bag or similar plastic bag and crush with a rolling pin. The finer you crush the Crystals the better (Image 7).

2. Place the crushed Crystals along with 3 scoops of Plaster of Paris into a mixing container (Image 8).

3. Add 2 scoop of warm tap water and mix well.

4. Wait for around between 30 and 60 seconds until bubbles have stopped appearing on the surface of the mixture and it is getting thicker, then pour the mixture into the Fairy Wing Mould and place the Fairy Body on top so that the pegs press into the plaster mixture and the head and legs line up with the indents in the mould (Image 9).

5. After an hour, place a few dots of Neon Gel Paint onto the wings (Image 10). Don’t cover the whole surface or the crystals won’t be able to stick to the wings.

6. Leave overnight to set completely.

Making Your Fairy Wings - Stage 2:

Items you will need which are not included in the kit: a measuring jug, a sandwich bag, small container, a spoon, a rolling pin and cling film.

1. Place 8 scoops of the Fairy Crystals in a sandwich bag or similar plastic bag and crush with a rolling pin. The finer you crush the Crystals the better.

2. Run the hot tap for 30 seconds to allow the water to get as hot as possible and then measure 100ml of warm water into a measuring jug.

3. Add the Fairy Crystals and stir for 5 minutes until they have all dissolved – if you can still see a lot crystals after 5 minutes of stirring, ask an adult to microwave the solution for 30 seconds, then carefully continue stirring until no more crystals will dissolve. This is called a saturated solution.

4. Let the solution stand for 5 minutes.

5. Remove the fairy from the Wing Mould and place it into a small container such as a plastic food storage container or a take away tray, with the plastic fairy body facing upwards (Image 11).

6. Pour the saturated solution over the top, covering the fairy, leaving any undissolved crystals in the measuring jug.

7. Cover with cling film and wait 24 hours for the magic to happen.

8. The crystals will have grown after 24 hours, but will continue to grow for up to 1 week.
Finishing Your Fairy Door:

1. When you are happy with the results, carefully lift out your finished fairy to reveal the sparkly magic.
2. Add more dots of gel paint if you wish.
3. Slot the fairy into the hole in the UV Light Unit (Image 12).
4. Cut out the picture of the Fairy Door on this page and attach it to the flat side of the Crystal Fairy Jar.
5. Place the Crystal Fairy Jar over the top of your fairy and turn on the UV Light Unit to reveal your sparkly, illuminated fairy (Image 13).

What’s happening in this experiment? The Fairy Crystals are made from Aluminium Potassium Sulphate (Alum). When the Alum dissolves in the warm water, the Alum molecules (the tiny building blocks of matter), break apart and move around freely within the gaps between the water molecules. The saturated solution you made contained loads of Alum dissolved in the water. As the water evaporates, there is no more room to hold the Alum molecules, so they come out of the solution and join together in very regular three-dimensional crystal structure. The hard Plaster of Paris Fairy Wings you made had pieces of Alum embedded in them. The Alum molecules like to stick to their own kind so the molecules coming out of the solution, easily find homes attached to the Alum in the Plaster of Paris creating a layer of crystals on the surface.

Did you know: Plaster of Paris is made by subjecting gypsum to high temperatures. This turns the gypsum into calcium sulphate. This is then ground into a fine white powder. When water is added, it forms into a paste. Plaster of Paris has been used since ancient times and dates back over 9000 years ago. Egyptians used plaster as a binding material in their pyramids. We call it Plaster of Paris because large quantities of gypsum was mined from Montmartre in Paris.
The UV Light Unit requires 2xAAA batteries (not supplied). We recommend alkaline batteries for optimum performance.

An adult should install the batteries and take note of the following – open the cover on the base of the unit by using a cross head screwdriver. Insert the batteries making sure the + and – signs on the batteries are aligned with the corresponding + and - markings inside the compartment.

- Do not recharge non-rechargeable batteries.
- Do not mix different types of batteries such as alkaline and rechargeable, or used and new batteries.
- Rechargeable batteries are to be removed from the toy before charging them.
- Rechargeable batteries are only to be charged under adult supervision.
- Only batteries of the same or equivalent type as recommended are to be used.
- Insert batteries in the correct polarity.
- Remove exhausted (used) batteries from the toy.
- Remove batteries from the toy if it is not going to be used for a long period of time.
- Do not short-circuit the supply terminals.
- Batteries should be replaced by an adult.
- Do not attempt to power battery products from the mains supply and do not insert connecting wires into electrical socket outlets.
- Dispose of used batteries at a recycling point. Never dispose of batteries in fire.

Disposal of old electrical and electronic equipment. This symbol on the product or its packaging indicates that this product should not be treated as household waste. Instead it should be handed over to the appliance collection point of a recycling centre for electronic and electrical equipment. For more detailed information about recycling of this product, contact your local Civic Office, your household waste disposal service or the place you purchased this item from.