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| **Activity title** |
| **Make a homemade snow globe** |
| **Stay safe** |
| Whether you are a scientist researching a new medicine or an engineer solving climate change, safety always comes first. An adult must always be around and supervising when doing this activity. You are responsible for:    • ensuring that any equipment used for this activity is in good working condition  • behaving sensibly and following any safety instructions so as not to hurt or injure yourself or others    Please note that in the absence of any negligence or other breach of duty by us, this activity is carried out at your own risk. It is important to take extra care at the stages marked with this symbol:⚠ |
| **Time required** |
| 30 minutes to 1 hour |
| **Activity summary** |
| There’s something truly mesmerising about watching the snowflakes falling in the magical, miniature world of a snow globe.  You’re going to love making your own globe but don’t dive straight in – gather everything you’ll need for the activity first. We’ve provided some helpful tips below.  By doing this activity you will develop your practical skills, learn about viscosity, get creative and have a lot of fun! |
| **What equipment will you need?** |
| * Clean jam jar (no labels) with a tightly fitting lid * Biodegradable glitter * Christmas decoration or ornament – make sure it’s waterproof and small enough to fit in the jar * Water * Glue gun and glue stick (or waterproof glue – a tube of clear, silicone sealant will do) * Glycerine (or light corn syrup) |
| **How to do it** |
| **Watch our video:** [**https://www.youtube.com/watch?v=4V8MW1uLbvw**](https://www.youtube.com/watch?v=4V8MW1uLbvw)  **Step 1: Stick your ornament to the lid**   * Glue the base of your decoration or ornament to the inside of your jam-jar lid ⚠   **Step 2: Add water**   * Add water – don’t fill it right to the top, because you’ll need room for the ornament that you’ve stuck onto the lid!   **Step 3: Add glycerine or syrup**   * Add a small amount of glycerine or light corn syrup. * The more glycerine or corn syrup you put in, the slower your glitter will fall. The glycerine or syrup makes the liquid more ‘viscous’. The higher the viscosity of a liquid, the ‘thicker’ it is (for example, honey is more viscous than water).   **Step 4: Add some sparkle**   * Add glitter. * If you add too much, your glitter will clump together. * Observe how quickly the glitter falls to the bottom of the jar.   **Step 5: Secure the lid**   * Add waterproof glue around rim of the jam jar. ⚠ * Screw on the lid very tightly and leave for five minutes. * Make sure you’ve created a watertight seal – turn the jam jar upside down in a bowl, to check for leaks!⚠   **Step 6: Enjoy the effect**   * Shake your snow globe, then enjoy the full snowstorm effect!   We hope you had fun making your glittery snow globe. If you’ve got more jam jars handy, why not make a themed collection, to display in your room? Or you might like to offer them as home-made Christmas gifts to your friends and family. |
| **Three Christmas kisses and a wish** |
| It’s always great to reflect on a job well done. Show your snow globe to a friend or family member and ask them to tell you three good things about it, and one thing that could be improved.  You could then use their feedback on your design to make another snow globe that’s even better than the first. |
| **Festive fun** |
| After all that hard work, here are some cracking jokes to make you smile:   * **What do you get when you cross a snowman with a vampire?**   Frostbite   * **Did you hear about the very rude snowman?**   He didn’t carrot all   * **Why are snowmen never late?**   Because time waits for snowman |
| **Did you know?** |
| * The very first snow globe was created by accident in 1900 by a man called Mr Perzy in Vienna, Austria, while he was doing an experiment to make electric light bulbs brighter! * Think of a snowy scene and there’s sure to be a polar bear lurking, somewhere in your mind! We’ve gathered some interesting facts about these amazing creatures.   + They are the world’s largest carnivore (1.6m high; up to 2.5m long; males weigh up to 650kg and females weigh up to 350kg).   + They are classed as a marine mammal because they depend on the ocean ecosystem to survive.   + They can be found in Greenland, Norway, Canada, the US and Russia, as well as on Arctic sea pack ice.   + They live for around 30 years.   + Their skin is black, but their hollow-cored hair is colourless and reflective – that’s why they look white, just like the snow.   + They are nearly undetectable by infrared camera.   + Their huge paws (30cm long, 25cm wide) help to distribute their weight when they are treading on thin ice.   + The underside of their paws is covered in papillae. These small, soft bumps are a bit like the underside of sports shoes – they grip the ice and stop the bears from sliding.   + A polar bear will gently ‘kiss’ another bear’s nose to ask permission to share their food! |
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| **Bonus activity – Make a Christmas crown** |
| If you love creating things, this activity is for you. We’re going to show you how to make a Christmas crown to be proud of! In fact, you might even like to make a matching crown for your favourite teddy bear, or even your pet dog or cat… |
| **Here’s what you’ll need:** |
| * String or ribbon * 3 sheets of a4 paper or craft paper * Scissors * Glue * Decorations (stickers, sparkles, ribbons… it’s up to you!) * Mirror |
| **How to do it** |
| **Step 1: Measure your head**   * Starting in the middle of your forehead, use string or ribbon to measure your head * Add another 2cm then cut the string or ribbon * Wrap it round your head again to check that it’s the right length     **Step 2: Make triangles**   * Fold the paper over to make a triangle * Carefully cut away the spare rectangle ⚠ * Carefully cut along the fold ⚠ * Repeat this process twice * You now have six triangles   **Step 2: Overlap the triangles**   * Overlap the triangles on a table * Lay out your string below the straight edge * Adjust your triangles to make the straight edge the same size as the string   **Step 3: Join the triangles**   * Use sticky tape on the short edges to secure the overlap ⚠ * Add a line of sticky tape along the bottom of the crown ⚠ * Turn over the crown and repeat the process   **Step 4: Decorate your crown**   * Add your own unique design magic, to make your crown look really special! * Re-use the string or ribbon by sticking it along the bottom edge of your crown   **Step 5: The final step**   * Cut off a small piece of sticky tape ⚠ * Wrap your crown around your head so that it’s the perfect fit * Add sticky tape and take off the crown * Secure the join with more sticky tape (on the inside of your crown too)⚠   And there you have it – a simple and stylish Christmas crown, made in a matter of minutes! |