

Winter Activity Challenge

Shout About Science!

Make Your Own Slime

Place some cornflour into a large mixing bowl and little by little, add water and use your hands to mix it into the cornflour. Keep mixing until the cornflour and water have blended together and the slime is the consistency of thick honey. Why not add some glitter or food colour and make up a story about where your slime came from? Try out a few experiments to see how your slime reacts. Do you think your slime is a liquid or a solid?

Nighttime Animal Detective!

When the public do their bit to help with a science project, we call it 'Citizen Science'. It's a great way to get involved with real science happening around the world! Be a Citizen Scientist for the [eMammal Challenge](#) on [Zooniverse](#), and see how many sneaky night time critters you can identify with the hidden cameras. Follow the link: www.zooniverse.org/projects/emammal
How do you think this might help the scientists who are studying these mammals?

Stargazer

Head out star hunting with your family! Use a star map and pick some constellations to hunt for. You can find a star map here: www.astronomynow.com/uk-sky-chart/
Ask your teacher or librarian to print this for you.
Can you find any constellations – if so, how many? Find out about when some famous constellations were discovered, and the stories behind their unusual names.

Save the Planet at Christmas

Planet-friendly Presents

Design and make some wrapping or packing material for a Christmas present, using reused packaging, paper or packing material. Your present wrapping could be made from: reused paper, boxes, or even cleaned plastic bottles – get creative! Make sure you decorate it with bright colours and winter themed decorations.

An act of Christmas kindness

Take part in something to help others or improve the environment this Christmas. You could...

- Organise a collection for your local food bank
 - Volunteer to help a local charity (make sure you ask an adult!)
 - Do a 3 minute beach clean
 - Organise a bake sale for charity
- How does being kind make you feel?

Eco Enterprise

We challenge you to design and make something from packaging material that's been thrown away or put in the recycling bin. Be the contestant in your very own Dragon's Den – you should make something that's useful, innovative and exciting that others will want to buy. Ask friends or family to judge your product – would they buy it? What do they like most about your product, and how could you improve it?

Help Others

Level up

Try our bonus activity, which is worth **2 credits!**

Do some volunteering with a local charity or with your school over Christmas. You'll need to ask your chosen charity or your school what opportunities are available – remember to ask an adult at home first!

You'll need to tell your teacher about your volunteering experience before you can collect your credits on Aspire. Once you do you can collect 2 credits!

Festive Science Quiz

Find out some fascinating science facts with a Christmas theme. You could learn about the lives of arctic animals, how Santa's sleigh flies, what reindeer eat or the furthest stop Santa has to visit to deliver presents. Make a quiz with the fascinating facts you've found out and test your friends and family!

Send us your questions to us at: contactus@childrensuniversity.scot and we'll share our favourites on our website and social media channels!

Swap-A-Skill

We all have a unique set of skills we can share. Some people can make things, have brilliant design skills or have amazing tech knowledge. Others might be able to play a musical instrument or write a story. Ask an older member of your family to teach you a skill they have, and in exchange you can teach them a skill you have. What did you enjoy most about learning a skill and teaching a skill?

When do you think you might use your new skill in the future?

Wrap up warm and Head Outdoors

Nature Trail

There's lots of native nature to spot in winter time. Head out with your family to a local nature trail. How many native species of animals and plants can you find? Keep a note of the animals you spot on your trip – you could even draw pictures or take photos. Find out about how the native animals you see adapt to survive the chilly winter months.

Be a book elf

Have you got a book you really enjoyed, but have finished reading? Be a book elf and donate the book to someone else so they can enjoy it too! You could hide the book somewhere safe and dry for someone else to find, or pass it to a friend you think might enjoy the book. Why not make and hide a special bookmark in your book, to ask the next reader to be a book elf and pass it on once they're finished reading?

Get Active

Option 1: [Parkrun](#) is a fun, free event anyone can take part in! Take part in your local Parkrun or Junior Parkrun. You can walk, jog, or run, and the events are weekly so you can improve every week!

OR

Option 2: Organise your own fun, active event for your friends or family at your local park. Make up some fun winter – themed outdoor games and keep a leader board to see who's the winner!

Be a Digital Detective

Movie Maestros

Listen to the music in one film you watch in the Christmas holidays. Find a song that makes you feel happy, and one that makes you feel sad or scared. What different instruments can you hear? How has the composer changed the speed and volume of the music to change the emotions of the audience? Do some online research and find out about how composers use music in film to create atmosphere and change the audiences emotions.

Your Amazing Brain

Did you know – your brain is faster and more powerful than a supercomputer? Do some research online – at home or in your local library. Find out 5 fascinating facts about your amazing brain. Make a poster or write a blog post about these fascinating facts. What are some ways we can make sure our brain stays healthy and keeps us happy?

You can find out lots about your amazing brain here:
www.natgeokids.com/uk/discover/science/geral-science/human-brain/

Dynasties

The BBC Dynasties series featured five animal families, and we learned about the exciting and challenging lives they live in the wild.

Pick one wild animal and learn about their habitat, what they eat, and how they work with their family group to survive and thrive. Make a fact file, short film or recording about your chosen animal dynasty. What characteristics make this animal perfectly adapted to survive and thrive in the wild?

THE RULES

- 1:** Once you've completed an activity, log into Aspire (www.CUS-Aspire.com) and collect **1 credit for each activity** you complete (except Level Up, which is worth 2 credits).
- 2:** You can take part in the winter challenge activities from the start of the Christmas holidays to the start of the Easter holidays. You can take part any time outside of normal school hours; in the holidays, at weekends, after school or at lunchtimes.
- 3:** Try to collect some evidence to show you've completed each activity. This could be a picture, piece of writing, photo, video or collage. Once you've completed an activity, you can show your teacher to get a stamp in your Passport to Learning!

4: Have Fun!

Why not get in touch?