

Eco-Schools 30th Celebration Tartan

Challenge: We challenge you to take inspiration from the story behind the new Eco-Schools Planet Earth Tartan and design your own tartan based on your local natural and built heritage. On completion, you can submit an image of your tartan and the story behind it to enter our competition, with the winner receiving a prize to help your school with its Eco-Schools activities.

Introduction

Did you know that Eco-Schools is 30 years old this year? It was launched in the UK four nations, Denmark and Germany in 1994. Scotland awarded our first Green Flag in 1995. To celebrate the incredible impact our Eco-Schools have had over the past 30 years we are running a series of challenges, with exciting prizes. As we are introducing our new Heritage Topic this year, this challenge is to create your own tartan inspired by the story behind the recently unveiled Scottish International Eco-Schools Planet Earth Tartan, using your local heritage to help create your tartan design.

Special thanks to Rosalind Jones for all her help in creating this resource.

Entering the competition

To enter the competition, please submit an image of your tartan and the story behind its design, with your school name to ecoschools@keepscotlandbeautiful.org with the subject 'Eco-Schools 30th tartan entry' by **31 May 2025**. One winning entry will be chosen by a panel of judges for nurseries, primary schools and high schools. The winning setting from each age category will win £200, sponsored by [HP](#), to help their school with its Eco-Schools activities. The winners will be notified by 6 June 2025 at the latest.



The story of the Scottish International Eco-Schools Planet Earth Tartan

The Scottish International Eco-Schools Planet Earth Tartan was designed by Rosalind Jones. Rosalind has designed several beautiful tartans over the years, including the [Mull Millennium Tartan](#), the [Antarctic Tartan](#) and the [Arctic Tartan](#).

You can find out more about Rosalind and how she came to design this tartan in our blog post: [Unveiling the Scottish International Eco-Schools Planet Earth Tartan](#).

Rosalind designed the Eco-Schools Planet Earth Tartan to symbolise the colours and proportions of our beautiful planet, surrounded by space as follows (from the centre, outwards):

- The surface of Earth:
 - The continents make up 29.2% of Earth's surface:
 - Half of the surface is vegetation: green
 - One sixth is desert: yellow
 - One third is ice: thin white
 - The oceans make up 70.8% of Earth's surface: blue
- The atmosphere:
 - Symbolically two pale blue lines representing our atmosphere surround and cross the design to depict our fragile atmosphere that safeguards us from incoming harmful solar energy: pale blue
- Space surrounds Earth:
 - Above the atmosphere is space: black
 - Beyond our solar system lies the Milky Way: white



Find out more on our webpage ['The Planet Earth Tartan'](#).

Activity

We would like you to design your own school or nursery tartan, taking inspiration from your local area, just as Rosalind has taken inspiration from planet Earth.

An adaptation for younger pupils can be found on page 4.

Today tartans can be designed by programming a Tartan design app on a computer but it's best to try your imagined design on paper first.

What you need:

- Coloured pens – felt tips work well as the colours can blend together
- Graph paper or a grid sheet
- Alternatively, you can create a digital design on a computer

Investigate your local heritage

Start by finding your school or nursery on a satellite map. You can decide how far out from your school or nursery you want to include. What colours can you see? How much of each colour is there? Do you know what all the colours represent?

Next, take a walk around your local area and notice what is around you. You could do this during school time or after school. What colours do you notice? What natural and built elements make up the area around you? Are there any local landmarks or natural features that you would like to include in your tartan design?

Now, it's time to dig a little deeper into the history of your local area. Talk to local people about what your local area used to look like. Were there any significant industries situated near you? Did there used to be

any natural features that have now gone, such as woodlands or wetlands? The [National Library of Scotland's side by side maps](#) can help you to investigate the past. You can search for your school or nursery on the map and then select different maps from the past to compare to what is there now.

Design your tartan

Once you have gathered all this information, it's time to design your tartan.

Choose up to seven 7 colours that you think describe your local area best. It does not need to be seven colours because very often fewer colours look better. Some tartan designers think four to six colours are best.

Then decide how many bands of each colour you want to include and how thick they should be.

It is important to remember when creating your design how tartan is made. Two lots of threads are woven together, warp and weft.

Warp: Tartan cloth is woven on a loom threaded with the colours of the tartan in the correct order and the correct number. These are the warp threads. They are the vertical threads to the tartan design.

Weft: Shuttles containing the different colours of the weft threads, the horizontal threads of the tartan design, weave colours across and through the warp threads.

Sett: When weft (horizontal) colours are woven into the warp (vertical) colours in exactly the same number of threads they make the square sett of the tartan. This sett design can be repeated several times across the width of the cloth.

To see the tartan weaving process in action, watch the video [How Scottish Tartan is Woven](#).

Make sure that the colours you use are **the same width** vertically (warp) and horizontally (weft). This will establish a simple but effective tartan which then relies on choice of colours to symbolise whatever it is you want to create.

Now you know which colours you are using and how thick the bands of each colour will be. It is easiest to start at the middle of your sett and work outwards. You could start with a square of colour and add bands of different colours and different widths. Or you could start with a square cross, then add square spaces in between the arms of the cross and make them all the same colour. There are infinite designs that can be made with a few colours. A tartan is like a huge criss-cross barcode or a colourful QR code. Use felt tips on grid paper to draw your design. This will help you blend colours together as happens when colours cross within tartan as it is woven. Alternatively, you could create your design on a computer using a drawing programme.

When your tartan is finished write the story behind its design including why you chose the colours and the thickness of each line and what they symbolise.

Display your tartan for all to see and enter it into our competition if you would like to.

Adaptations for younger pupils

For younger pupils, you may wish to simplify the activity:

Investigate your local heritage

Go for a walk around your grounds and local areas and ask pupils what colours they can see and what buildings or nature are represented by these colours. You could also do this using a satellite image of your school or nursery on a computer.

Design your tartan

Ask pupils to choose four to six colours based on what they found on their walk or from the satellite image. Then ask pupils to colour in strips of paper in their chosen colours. Pupils can then lay the strips of paper over each other to create their tartan design. If you want to increase the challenge, you can use the guidance given above for keeping the vertical and horizontal elements the same width in a square pattern.

Ask pupils to say why they chose the colours in their tartan design. This is your tartan's story.

Further information: a brief history of tartan

In past times weavers used hand spun and hand dyed wool of different colours and cleverly made different tartan patterns on their looms. They used lots of differently coloured homespun wool. Often weaving was done at home from homespun and home dyed wool to make cloth for clothing. Lengths of woven cloth was not cut but worn by highland men as plaids slung over the shoulder and pleated around the waist, held together by a leather belt. This kept them warm and dry if the wool was oily. But after the Battle of Culloden in 1746 highlanders were banned from wearing tartan and highland dress.

Much later weaving machines were invented, and homespun and home dyed wool were not used for industrially made cloth. In time tartan was allowed to be worn again, initially the Black Watch tartan when highlanders became soldiers of the king.

Gradually tartan was worn again but now it was thoughtfully designed, mostly for the many different Clans who, (since King George 4th visited Scotland and fell in love with tartan), all wanted their own proper Clan tartans.

During the reign of Queen Victoria tartan and everything 'Schottische' were very popular when she and Prince Albert lived at Balmoral.

Today there are over 7000 tartans to choose from and they have become a symbol of Scottish heritage.