Cadw

History Explorers

Castell Conwy

Quest: Flags and Heraldry



Cadw MINECRAFT EDUCATION Hwb®

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Learning Activity Support Guide: Quest Five - Castle Flags & Heraldry

Learning Objectives:

- Develop an understanding of the historical significance of flags and their symbolism.
- Develop an understanding of the principles of pixel art.
- Design and create a digital flag for Conwy Castle using Minecraft Education.
- Present their flag and explain its symbolism

Areas of Learning and Experience:

- **Humanities**
  -Enquiry, exploration and investigation inspire curiosity about the world, its past, present and future.
  -Events and human experiences are complex, and are perceived, interpreted and represented in different ways.
- **Expressive Arts**
  - Exploring the expressive arts is essential to developing artistic skills and knowledge and it enables learners to become curious and creative individuals.
  -Responding and reflecting, both as artist and audience, is a fundamental part of learning in the expressive arts.
  -Creating combines skills and knowledge, drawing on the senses, inspiration and imagination.
- **Mathematics and Numeracy**
  -Geometry focuses on relationships involving shape, space and position, and measurement focuses on quantifying phenomena in the physical world.
- **Language, Literacy and Communication**
  -Understanding languages is key to understanding the world around us.

Cross-curricular skills:

- **DCF**
  -Producing: Sourcing, searching and planning digital content, creating digital content and evaluating and improving digital content.
- **Numeracy Framework**
  - Learning about geometry helps us understand shape, space and position, and learning about measurement helps us quantify in the real world.
- **Literacy Framework**
  -Speaking: Clarity and vocabulary, purpose and collaborative talk.

Integral Skills:

- Planning and organising
- Critical thinking and problem-solving
- Creativity and innovation
- Personal effectiveness

Guiding Ideas / Possible questions to ask:

What can you tell me about the purpose and significance of flags in history?
What kind of flags are there?
What is heraldry?
Can you name colours and shapes that were used in heraldry?
What is pixel art?
What has inspired your flag design?
Can you explain the symbolism and your design choices?

Learning Activity Overview:

In this immersive activity, learners will embark on a creative adventure that begins with an engaging story designed to ignite their imagination and pique their curiosity. The narrative will transport them to a time and place where flags were essential in representing different identities.

Link to video Missing Flag, which is embedded in the Cadw Cymru Minecraft World

Next, learners will watch an informative video that delves into the various flags that adorn Conwy Castle, revealing the rich history and significance behind each one. Through vibrant visuals and intriguing facts, they will gain insight into the symbolism and heritage associated with these flags.

Link to video Flags Flown, which is embedded in the Cadw Cymru Minecraft World

Building on this knowledge, learners will explore the fascinating field of heraldry. They will discover the meanings behind colours, shapes, and symbols commonly used in coats of arms, enhancing their understanding of how these elements connect to identity and storytelling.

Link to video Desing a Flag, which is embedded in the Cadw Cymru Minecraft World

Finally, armed with inspiration and knowledge, learners will channel their creativity into designing and constructing a pixel art flag using Minecraft Education. This hands-on project allows them to express their artistic flair while applying what they have learned about flags and heraldry. By combining history with digital creativity, this activity fosters collaboration and encourages learners to think critically about the messages their designs convey.

The essence of the quest is to allow learners to engage with history, art, and technology interactively and creatively while fostering collaboration and presentation skills.

Learning Activity Introduction:



Castle Flags & Heraldry Quest NPC is located in the South-West Tower.

"Hey, did you see that when you walked up to the castle from the West Barbican, both the North-West Tower and the South-West Tower were supposed to have flags flying on them? But today, one of the flags is missing.

Click on the buttons to learn more!"

This is an exciting quest where creativity and history collide! In this quest, you can design and create your own flag using pixel art in Minecraft Education. Drawing on the knowledge you've gained about the significance of flags and heraldry, this quest invites you to express your unique identity and ideas through your custom flag design.

As you explore the vibrant world of pixel art, you can play with colours, symbols, and shapes, crafting a flag that tells a story or represents a concept important to you. A flag worthy of flying upon the South-West Tower of Conwy Castle! Are you ready to unleash your imagination and bring your artistic vision to life while learning about the powerful messages flags can convey! Let's dive in and start creating!

Discussion:

Start a discussion with learners about the purpose and significance of flags in history. What do they represent? Drawing out information they would have gleaned from the videos:

- **Link to video Flags Flown, which is embedded in the Cadw Cymru Minecraft World**
- **Link to video Design a Flag, which is embedded in the Cadw Cymru Minecraft World**

Show learners examples of flags, including those of Conwy Castle and other historical flags.

Pixel Art:

It would be advantageous to display examples of pixel art designs around the room for learners to draw inspiration from.

Practitioner support notes: Explain pixilation

The idea of pixel art has existed for a long time, even before the word "pixel" ever existed. Mosaics and counted cross-stitch are some old examples, and perler beads are a relatively recent addition. The word "pixel" is a combination of the words "picture" and "element" and is essentially just a tiny square of colour in an image on a computer monitor or television screen. Because of its blocky nature, Minecraft is a modern medium perfect for constructing pixel art.

Simple designs are a good starting point for learning the basics of pixel art. Some images used in Minecraft are perfect examples of pixel art and can serve as an ideal first project. For example, the iron sword icon in the inventory is an image that fits in a 16x16 square. It's pretty plain to see that each block of colour in the image can correspond to a Minecraft block in a Minecraft world. Because the image only measures 16x16, counting each pixel to figure out where to put each block is relatively easy. The most challenging part is determining which Minecraft blocks to use to represent the different colours.

Generally, the most useful Minecraft blocks for pixel art are concrete, concrete powder, wool, and terracotta because they come in many different colours and are pretty uniform in their appearance.

However, one thing to be aware of is that concrete powder blocks fall when placed in the world. To combat this without placing extraneous blocks that would distract from your artwork, you can use barrier blocks visible only when you have a barrier block in your hand. The barrier block is not available in the creative inventory and cannot be crafted, but you can obtain it with the command **/give @s barrier** as long as cheats are enabled.

To get a good look at the iron sword icon, capturing the image via screenshot and then zooming in on it in an image editor can be helpful. With the enlarged view of the iron sword, you can examine the colours closely to select blocks in Minecraft and ensure that your pixels correspond perfectly with the original image.

Minecraft Pixel Art Tutorial

The process described above outlines the fundamental steps of using Minecraft to create pixel art from an existing image.

1. Basically, you start with an image to inspire you.
2. Use an image editor to closely inspect that image for dimensions and colour accuracy.
3. Select which Minecraft blocks to use for the different colours.
4. Finally, build the image in Minecraft with pixel-perfect accuracy.

In this process, the only step that isn't unquestionably precise is selecting Minecraft blocks to represent the pixels in the image.

As with most artistic endeavours, becoming a master Minecraft pixel artist takes lots of practice. As learners make more and more Minecraft pixel art and take on more challenging projects, they will develop a sense of what works well, what doesn't work well, and how to make troublesome spots look good.

Useful reference weblink

A weblink to a Pixel art tutorial from Minecraft Wiki

Planning:

Remind learners of the information they gleaned from the Conwy Castel virtual tour, its history, and any associated symbols that could inspire their flag design.

Distribute graph paper and have learners begin sketching their flag designs, keeping in mind the colour palette and symbolism.

Peer Review

Organise learners into pairs to share their sketches and get feedback.

Build in Minecraft Education:

Guide learners in setting up their Minecraft world specifically for their flag project, e.g. blocks of Grass World.

Provide learners with a guide/tutorial on how to use the pixel art feature in Minecraft to create their flags, covering essential tools and blocks needed. (See **Practitioner support notes: Explain pixilation** section and **weblink**)
Allow learners time to create their flags digitally in their Minecraft world.

Encourage creativity and innovation, reminding them to make their designs easily recognisable.

Plenary / Reflection:

Show and Tell

- Have learners present their flags to the class, explaining the symbolism and design choices.
- Encourage classmates to ask questions and provide positive feedback

Class Discussion

- Discuss what they learned about flags, art, and using technology in creative projects.
- Reflect on what they found easy or challenging in the design and creation process.

Key Vocabulary:

Flag
Pixel Art
Heraldry
Heritage
Symbolism
Coat of arms
Identity
Ordinaries
Charges

Resources / Supporting Files:

- Minecraft Education app installed on devices.
- Cadw Cymru Minecraft World.
- Projector or Smart Board (for demonstrations)
- Graph paper (for planning designs)
- Colouring materials for physical sketches
- Flag inspiration resources (images of historical flags, symbols, etc.)