Japanese Wagara Patterns

What do you think inspired these patterns?

What could they symbolise?

Lesson task (title: Wagara Pattern Design)

Period 1 To create an A4 well presented research page (digitally or by hand – either way it will need to be stuck neatly into your sketchbook) on Wagara patterns.

Include the following (all should be written in your own words):

- A brief explanation of what a Wagara pattern is and the history of it.
- What inspired the wagara pattern designs?
- Four visual examples with annotations explaining what inspired the pattern and what it means/symbolises.

(I would like you to read slide 3 and 4 before you start, but you will also need to do your own research).

Period 2 To take four photos of natural motifs on a white background, that could be used to create you own pattern. These will need saving as we will be using them digitally next lesson. You will also need to present them and put them in your sketchbook (See slide 5 for full details and my example).

Then pick the best motif and create a simple repeat showing how you might use it to create a pattern.

NOTE : THIS WHOLE TASK WORKS BEST IF YOU DO IT IN POWERPOINT, IT WILL NEED PRINTING OUT AND STICKING IN ORDER IN YOUR SKETCHBOOK, BUT IT CAN BE SAVED AS A PDF COPY AND SUBMITTED DIGITALLY VIA SMHW).

What inspired Wagara patterns?

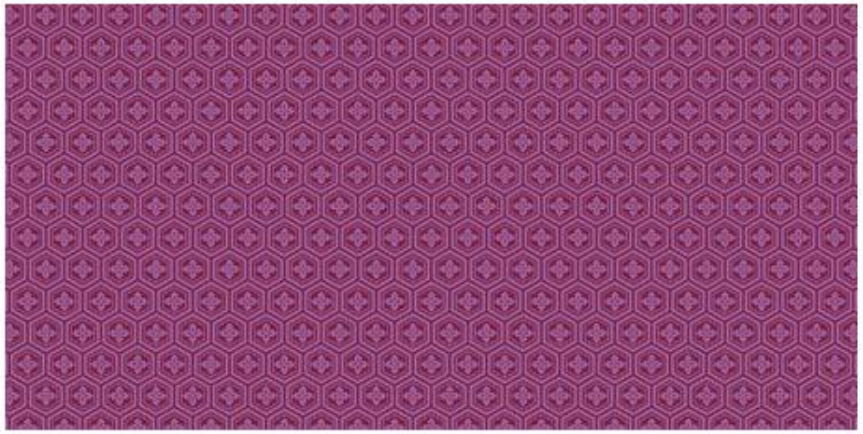
Most of the designs had a Chinese influence, but from the mid-9th century they were translated into patterns that fitted Japanese style by incorporating its tradition and the four seasons. The Japanese have a profound appreciation of **nature,** and each motif taken from nature has symbolic meaning. For instance, pine, bamboo, plum blossom and chrysanthemum represent the four seasons. You may find these motifs from nature used alone or closely linked to other traditional Japanese items such as fans, butterflies and bridges.

What do the patterns mean/symbolise?

Today there are many kinds of Wagara with different combinations of colours while succeeding to the traditional design.

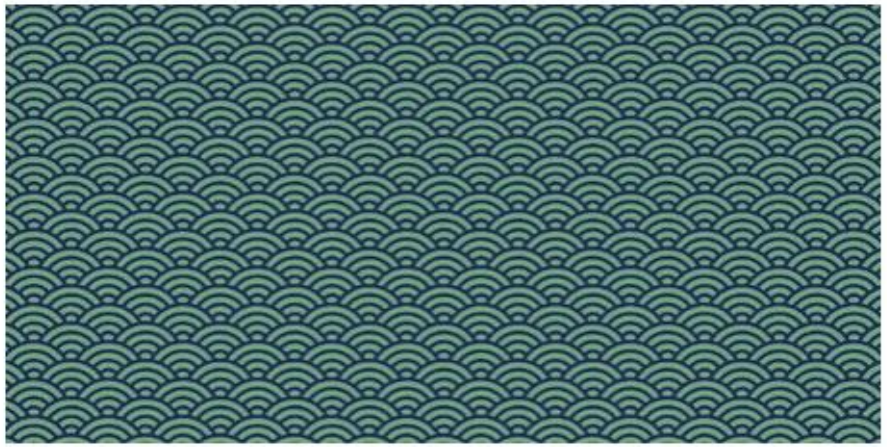
Here we'd like to look at some of the designs focused on geometry patterns with the meanings and origins behind them.

Kikko hanabishi



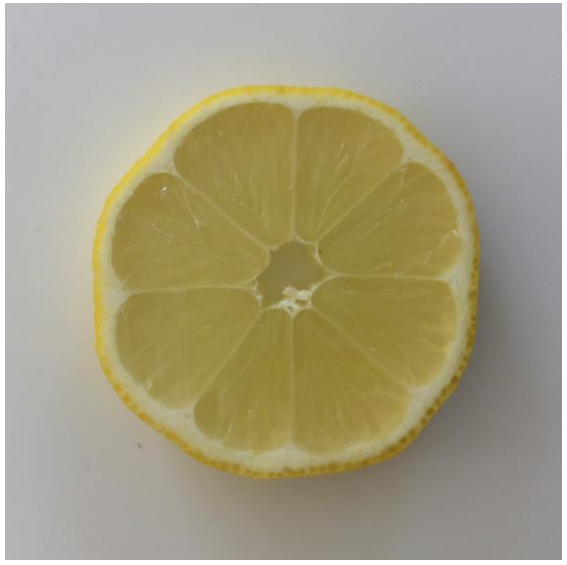
You can see flowers within a hexagonal geometry pattern. This kind of hexagon shape is found on relief in West Asia in B.C. Kikko means tortoise shell which is taken to symbolise longevity and fortune omen.

Seigaiha



This pattern is sea wave spread like a fan. It was originally introduced from Persia. It has the meaning to lead a peaceful life just like ever-lasting calm wave.

Notice how I have taken each one from above (bird's eye view) and each one is surrounded by white space, there is nothing visible in the background and there are minimal shadows. This is very important for the next lesson task.



My photographic examples of natural pattern motifs…

How to create a pattern

A pattern relies upon three characteristics:

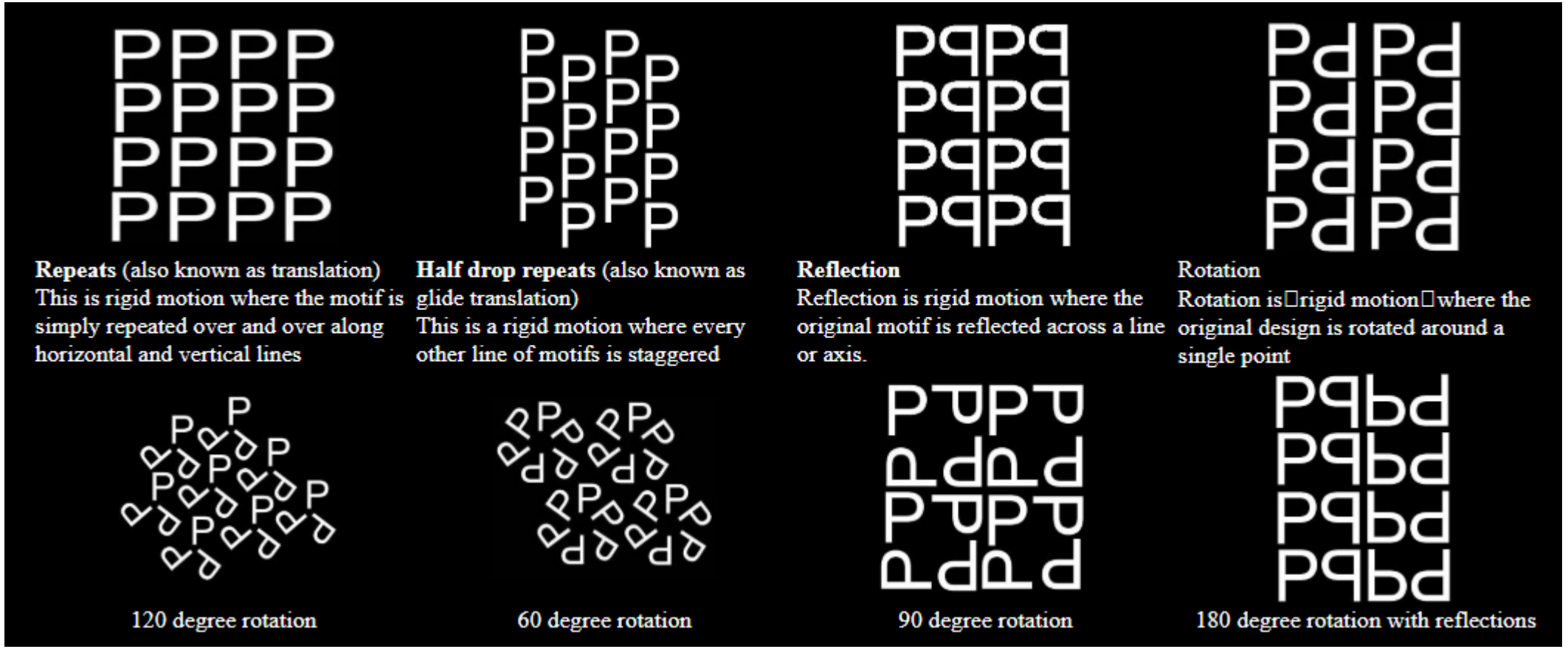
- a single motif,
- repetition of the motif,
- a system of organisation

There are four basic ways that you can repeat a motif to create a pattern:

- repeats
- half drop repeats
- reflection
- rotation

Mathematicians call these repetitions “rigid motions” because the movements do not lead to any change of size or shape of the original motif. The four basic ways of creating a pattern can be combined to make seventeen distinct pattern types. In the following examples P (for pattern) has been used to illustrate the various ways patterns can be formed by using a single motif in various different ways (see slide 9 for my example).

Examples of how patterns are created using the letter ‘P’



Repeats (also known as translation)
This is rigid motion where the motif is simply repeated over and over along horizontal and vertical lines

Half drop repeats (also known as glide translation)
This is a rigid motion where every other line of motifs is staggered

Reflection
Reflection is rigid motion where the original motif is reflected across a line or axis.

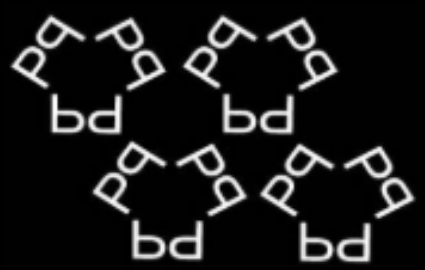
Rotation
Rotation is rigid motion where the original design is rotated around a single point

120 degree rotation

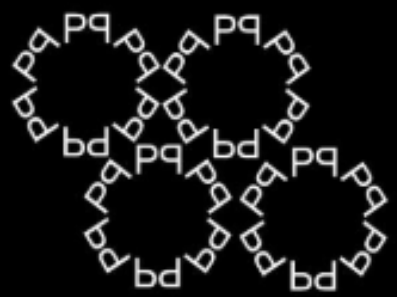
60 degree rotation

90 degree rotation

180 degree rotation with reflections



120 degree rotation with reflections



60 degree rotation with reflections

90 degree rotaion with reflections

90 degree rotaion with reflections

Reflections and reflections

Rotations and reflections and reflections

Half drop reflections

Reflections and half drop reflections

Now have a go at creating a simple pattern using one of your photos…

This is quick and easy to do in PowerPoint if you copy the image, click on each image in turn, click ‘format’ at the top and use the rotate function or just manually rotate each one using the mouse cursor. Include which repeat pattern you are aiming to create, you can copy this from the previous two slides. I have just taken a section of the 90 degree rotation pattern.