**Nature art**

**Lesson 1: Representing nature**

**Introduction**

In this ‘unplugged’ lesson pupils use traditional art techniques to represent images collected on a nature walk. They consider the rules and the processes when working with the different materials, developing their logical reasoning and algorithmic thinking, and evaluate their work.

**Time:** @60 minutes

**Materials needed:** lesson presentation, digital images collected from a nature walk (to display and to give to pupils), paper to sketch, draw and paint on, a selection of art materials of your choosing. E.g. sketching pencils, paints, paint brushes, charcoal, oil pastels, clay, sculpting tools, a selection of images showing nature/wildlife represented using the artistic techniques you choose to use.

**Learning objectives**

* To use logical reasoning when making predictions
* To abstract relevant detail from a nature image
* To create nature representations using a variety of art materials

**Lesson summary**

* Nature walk – prior to the lesson
* Introduction: representing images (10 minutes)
* Creating artistic representations (40 minutes)
* Evaluating artistic representations (10 minutes)

**Nature walk (prior to the lesson)**

* Prior to the unit take pupils on a local area nature walk during which they record examples of flora and fauna they observe, ideally by recording digital images using a digital camera, tablet, etc.
* You will also need to conduct an internet search for suitable images to display showing sketches, drawings, paintings and sculptures of animals, plants and flowers.
* You may wish to set up the classroom for this lesson so there are 3 art-zones e.g. an area for sketching, an area for painting and an area for sculpting. Images of each area could be taken in order to support pupils algorithmic writing in the next lesson.

**Introduction: Representing images (10 minutes)**

* Remind pupils of their nature walk and ask them to share some examples of nature they observed (**slide 3**). You could also display the digital images you collected to help stimulate conversation.
* Show pupils the images of drawings/paintings/sculptures of animals/plants/flowers you collected prior to the lesson and invite pupils to group the images in different ways, including based on the techniques used to create them (painting, sketching, sculpting). Discuss briefly how they could represent the images from the nature walk using these techniques.
* If using, draw pupils’ attention on each of the *art-zones* in the classroom and ask them to predict what type of representations would be created in each. Ask pupils to justify their predictions by using the equipment that is on the table as evidence, e.g. ”*I think we will be doing sculpting in this zone because there is clay, clay tools and water”.*
* Use **slide 4** to explain/remind pupils that when they make predictions like this, they are using logical reasoning.
* For each zone, ask pupils to give instructions on how the equipment should be used and add any additional rules based on your classroom context.

**Creating artistic representations (40 minutes)**

* Provide pupils with a selection of images recorded on the nature walk. Ask them to pick one they find interesting and explore how they can use represent the image using the given materials in each area (**slide 6**).
* Explain to pupils that the entire image doesn’t have to be represented and that for some images it might be easier to select part of the image to represent. Invite pupils to suggest which parts of a tree, plant, animal, etc. could be represented (leaf from a tree, tail of a squirrel, flower of a plant).
* Use **slide 7** to explain to pupils that when they select part of the image to represent they are using a computer science concept called **abstraction**.
* Allow pupils sufficient time to produce a representation in each *art-zone*. Using a tablet or a digital camera, record images of the pupils’ artwork for use later in the unit.

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**Evaluating artistic representations (10 minutes)**

* Show **slide 8** and invite pupils to share their representations with the rest of the class, asking them to state what part of their representation they are most happy with and what changes they would make.
* Lead a class discussion around which art materials created the most effective representations and why.
* Use **slide 9** to highlight to pupils that they have just been evaluating their work and ask pupils why it is important to identify the success and areas for improvement for any piece of work.
* Use **slides 10 and 11** to review the learning outcomes of the lesson and the key computing concepts covered.

**Extension ideas:**

* Pupils could research the work of wildlife artists like David Shepherd, Carol Gillian and Charley Harper and identify similarities and differences between the representations.

**Differentiation**

**Support:**

* Pupils who may require additional support when creating artistic representations could be grouped together and supported by an adult as they use each art zone.

**Stretch & challenge:**

* Pupils may wish to spend more time in one art-zone to produce a more detailed representation using the given art materials.

**Opportunities for assessment:**

* Informal observations of pupils’ use of logical reasoning when making predictions during class discussions.
* More formal assessment of pupils’ use of abstraction when selecting the detail to represent and of their final artistic representations.