

Classroom activities

Stage three / Lesson three



Learning Outcomes

A student:

- **VAS3.2** Makes artworks for different audiences, assembling materials in a variety of ways.



Cross Curriculum Links

A student:

- **VAS3.1** Investigates subject matter in an attempt to represent likenesses of things in the world.



Resources and Preparation

Resources

- Worksheet 8 – Vegetable paints.
- Carrot, beetroot, red cabbage and silverbeet or spinach. To produce paint for 20 students, you will need 1 medium carrot, 1 medium beetroot, ¼ red cabbage, ½ bunch of silverbeet or spinach (leaves only, not stems). You will also need an extra quantity of one of the vegetables for the in-class colour extraction demonstration.
- Carrot, beetroot, red cabbage and silverbeet or spinach for a still life set up.
- Grater for grating carrot and beetroot.
- Knife for cutting cabbage and silverbeet.

Resources and Preparation continued >

Vegetable Art

Students learn how to make paint from vegetables.

Introduction (15 mins)

- Teacher asks students to brainstorm the different colours of vegetables and writes the answers up on the whiteboard (*note: there are 5 main colour categories for vegetables. These are red, purple/blue, yellow/orange, green and white/brown*).
- Advise students that the colours in fruits and vegetables are linked to health promoting compounds called phytochemicals. For example, carotenoids give orange and yellow fruits and vegetables their colouring. Carotenoids can promote good eyesight and healthy skin and mucous membranes.
- Advise students that they will be shown how to extract the colour from vegetables and how this can be used to make paint. They will then use the paint to make an artwork of vegetables.

Activity (60 mins)

1. Teacher undertakes a demonstration of how to extract colour from one of the vegetables using WS 8. *Note: the teacher has already extracted the colours that students will be using to make paints. The students will not be undertaking colour extraction.*
2. While waiting for the colour extraction process, students complete a still life drawing of the 4 vegetables.
3. Students are placed into groups of 4 students. Each student is provided with a copy of WS 8.
4. Students follow instructions on WS 8 and work in their groups to produce 4 portions of each paint colour using the pre-made colour extracts. Each student will produce 4 portions of one paint colour for use by their group.
5. Students stay in their groups and use the vegetable paints to colour their still life.

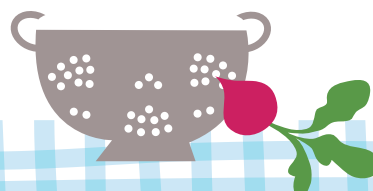


Conclusion (10 mins)

Selected students can present their artwork to the class.

Note: *this activity could be undertaken over 2 lessons. Complete activity up to and including part 2 (still life drawing). Then recommence activity with paint production and the painting of the still life.*

Vegetable Art activity continued >



Classroom activities

Stage three / Lesson three continued

Resources and Preparation

- Chopping board.
- Cup measure.
- Kettle to boil water.
- 2 heat resistant bowls.
- Strainer.
- Spoon for pushing vegetables into boiling water.
- Icing sugar (sifted). To produce paint for 20 students, you will need 1.5 kgs of icing sugar.
- Sifter and container to hold sifted icing sugar.
- 4 teaspoon measures – 1 for each colour extract.
- Tablespoon measures – 1 per 4 students (i.e. per group).
- Spoons or small whisks for stirring paint – 1 per student.
- Small plastic bowls or other containers to make and hold paint – 1 per student.
- Art paper – 1 per student.
- Thin tipped paint brushes – 1 per student.
- Drawing pencils for outlining.

Preparation

2–3 weeks prior to lesson:

- undertake a WHS risk assessment for teachers use of kettle/boiling water, according to your school policy.

1 week prior to lesson:

- send a note home requesting donations of vegetables for lesson.
- request donations of vegetables from school community.

1 day prior to lesson:

- using WS 8 produce colour extracts from the 4 vegetables and keep in the fridge until the day of the class.
- sift icing sugar and place in a large sealed container.

Prior to lesson:

- prepare 1 vegetable (e.g. grate or finely slice) for in-class colour extraction demonstration. Place in a heat resistant bowl.
- photocopy WS 8 – 1 per student.

Duration | 85 minutes

Assessment

- For:** Student identifies colours in vegetables.
As: Student follows procedure correctly to create paints.
Of: Quality of student artwork.

Differentiation

- Extend:** Students investigate what other vegetables could be used to make paint.
Simplify: Students undertake tasks with assistance.

School/Home Link

Student takes copy of WS 8 home and can attempt to make vegetable paints using other brightly coloured fruits and vegetables.



How to make vegetable paints

Extracting the colour

Ingredients

- Vegetable of choice, washed. Allow enough to produce 1 cup when it is grated or finely sliced.

Equipment

- Kettle.
- 2 heat resistant bowls.
- Strainer.
- Spoon.

Method

Step 1

Grate or finely slice chosen vegetable.

Step 2

Place vegetable into a heat resistant bowl and pour over just enough boiling water so that all of the vegetable becomes wet. This is approximately 100mls. Push the vegetable down into the water with a spoon so that all of it is exposed to the hot water. Do not add too much water because this will dilute the colour!

Step 3

Leave to stand for 10 minutes.

Step 4

Strain the liquid and vegetables into another bowl. Press down on the vegetable to extract as much coloured liquid as possible.

Step 5

Pour the liquid into a container with lid and place in the fridge until needed. You should have about 100mls of liquid. This is enough to make 20 small individual portions of paint.

Making the paint

Ingredients

- Vegetable colour extracts.
- Icing sugar, sifted. Allow approximately 20g of icing sugar (1½ tablespoons) for each small individual paint portion.

Equipment

- Teaspoon and tablespoon measures.
- Spoons and/or whisk.
- Small bowls to mix and hold the paint.

Method

Step 1

Add 1 teaspoon of colour extract and 1½ tablespoons of icing sugar to a bowl.

Step 2

Mix or whisk vigorously to combine. Paint is now ready to use.

Note: the paint colour will be much paler than the original extract due to the addition of the icing sugar.