

# science X art

food for thought



NATIONAL COMMITTEE FOR  
**NUTRITION**



INTERNATIONAL YEAR OF  
**FRUITS AND VEGETABLES**  
2021

## Activity Plan

## scienceXart

### About this activity

This activity is designed to support scienceXart: food for thought, a nutrition themed art competition for primary school students. In this activity, students will learn about the nutritional importance of different foods and use that to create an art piece that tells a science story.

### Learning intentions

- To identify different foods
- To categorise different foods
- To understand why eating a variety of foods is important



#### Time

This activity will take approximately 1 hour.



#### Target grade

Years 3 & 4



#### Resources

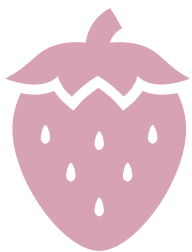
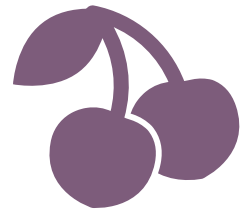
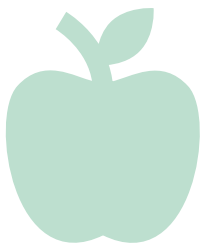
- Paper plates
- Various art and craft materials such as (but not limited to);
  - paint and paint brushes
  - oil pastels
  - crayons
  - coloured pencils/markers
  - paper
  - crepe paper
  - felt
  - cellophane
  - material
  - wool
  - buttons
  - paddle pop sticks
  - scissors
  - glue, etc

## Background information

In 2021, the United Nations are celebrating the International Year of Fruits and Vegetables. This year aims to promote the importance of fruit and vegetables, ideas of food sustainability and the benefits of a healthy diet. This resource aims to mirror these goals and target their positive health promotion principals towards primary aged children.

This activity aims to help child link the knowledge that fruits, and vegetables are important, with explanations of why this is the case. It does this by getting students to select different fruits and vegetables and link these to specific vitamin benefits. This activity utilising the ABCs of vitamins framework to guide this learning.

Children can explore these scientific ideas through the creative means of a tactile craft activity. After engaging with the creative side of the activity, students will be called to transform their learning and think reflectively about why we eat fruits and vegetables.



## Curriculum Links

Year level	Curriculum Area	Content descriptors	Relevant elaborations
Years 3 - 4	<b>Health and Physical Education –</b> Personal, Social and Community Health	<b>ACPPS036:</b> Identify and practise strategies to promote health, safety and wellbeing.	<ul style="list-style-type: none"> <li>Examining their own eating patterns by researching <i>The Australian Guide to Healthy Eating</i> and identifying healthier food choices.</li> </ul>
Years 3 - 4	<b>The Arts –</b> Visual Art	<b>ACAVAR113:</b> Identify intended purposes and meanings of artworks using visual arts terminology to compare artworks, starting with visual artworks in Australia including visual artworks of Aboriginal and Torres Strait Islander Peoples.	<ul style="list-style-type: none"> <li>Writing about and discussing with others the meaning of their own artworks.</li> </ul>
Years 3 - 4	<b>Technologies –</b> Design and technologies	<b>ACTDEK012:</b> Investigate food and fibre production and food technologies used in modern and traditional societies.	<ul style="list-style-type: none"> <li>Recognising the benefits food technologies provide for health and food safety and ensuring that a wide variety of food is available and can be prepared for healthy eating.</li> <li>Investigating the labels on food products to determine how the information provided contributes to healthy eating, for example ingredients and nutrition panels.</li> </ul>
Years 3 - 4	<b>Science –</b> Science as a Human Endeavour	<b>ACSHE051/ ACSHE062:</b> Science knowledge helps people to understand the effect of their actions.	<ul style="list-style-type: none"> <li>Investigating how science helps people such as nutritionists, dietitians and food scientists.</li> <li>Exploring how science has contributed to a discussion about an issue such as human nutrition.*</li> </ul>

Above material is sourced from the Australian Curriculum: Australian Curriculum Assessment and Reporting Authority (ACARA). (2021). Australian Curriculum: Science. [www.australiancurriculum.edu.au](http://www.australiancurriculum.edu.au)  
Retrieved 5 May 2021.

## Pre-activity class discussion

Invite students to share their ideas on the vitamins and minerals the human body needs, and the functions they support the body to perform, for example;

- supporting growth
- healing wounds
- strengthening bones
- supporting the immune system

List the names of vitamins students know, and information about their purpose and foods that contain them. Fill in any information gaps using the information in the table provided below.

(Students may be able to name many of the vitamins, and may already know foods that contain them, but they may need support to name their purpose.)

Support student understanding by asking questions such as;

- If I were to eat an orange, what vitamin would I be getting lots of? (vitamin C).
- If I wanted to make my bones stronger what might I eat? ( food containing vitamin A and D such as kale, milk and oranges).

Vitamin	Purpose	Common Foods
A	Keeps our teeth, eyes, bones and skin healthy	Yellow/orange fruits and vegetables Green vegetables
B	Helps turn food into energy	Meat Nuts Fish Eggs Beans/lentils Whole-grains Milk
C	Helps to fight sickness and keeps gums, bones and blood vessels healthy	Citrus fruits Red fruits and veggies Green fruits and veggies
D	Helps keep our bones and teeth healthy	The sun (not a food) Dairy products Fish Mushrooms
E	Keeps our blood clean and our heart healthy	Nuts Fish Eggs Yellow/orange fruits Green vegetables
K	Helps keep our blood healthy and clotting	Green fruits and veggies Eggs

## Additional examples

Below are more examples of foods that are high in vitamins you might wish to use or provide to students.

Vitamin A   Vitamin B   Vitamin C   Vitamin D   Vitamin E   Vitamin K

### Vitamin A & Vitamin E

#### Yellow/Orange fruits & vegetables

- Carrots
- Rock melon
- Sweet potato
- Grapefruit
- Pumpkin
- Yellow capsicum
- Corn
- Peaches
- Pineapple
- Oranges
- Mangos
- Lemon

### Vitamin A, Vitamin C, Vitamin E & Vitamin K

#### Green vegetables

- Spinach
- Kale
- Cabbage
- Asparagus
- Broccoli
- Rocket
- Lettuce
- Brussel sprouts
- Peas
- Avocado

### Vitamin B

#### Whole-grains

- Brown rice
- Whole meal bread
- Whole-wheat biscuits
- Oats
- Whole-grain pasta
- Quinoa
- Buckwheat

### Vitamin C

#### Citrus fruits

- Lemon
- Lime
- Orange
- Grapefruit
- Mandarin

### Vitamin C

#### Red fruits & vegetables

- Tomatoes
- Red capsicum
- Strawberries
- Grapefruit
- Guavas
- Watermelon

### Vitamin C & Vitamin K

#### Green fruits

- Apples
- Pears
- Lime
- Grapes
- Honeydew
- Kiwi

### Vitamin D

#### Dairy products

- Milk
- Yoghurt
- Butter
- Cheese

**Activity****Make a healthy plate of food**

Students plan a healthy meal which must include a variety of the healthy foods as previously discussed.

Students create an artistic representation of this meal on a paper plate using the art and craft resources provided.



Image sources: <https://www.mwpai.org/view/kids-corner/743/kids-craft-corner-paper-dinner-plates>  
<https://healthyfood-recipes9.blogspot.com/2021/05/paper-plate-healthy-food-craft.html?c=1>

## Discussion and Reflection

Students name the foods they have included in their healthy meal. Using the vitamin table created in the initial activity, they identify the vitamins included in the meal. Prompt students to name the most present vitamin/s. Students describe the purpose of those vitamins in a healthy diet.

Potential discussion questions include:

- What foods did you include in your meal?
- What vitamins does your meal contain?
- How does the food you chose help keep people healthy?
- How healthy do you think this plate of food is? Why?
- What changes could you make to the plate to make it more healthy or unhealthy? Why would those changes have that impact?
- Which foods on your plate contain the most amount of vitamins?

Students to write a short reflection on their plate, including the names of foods they included in their meal, and their responses to the above questions.

Display plates and student reflections.

**Teacher note:** The marking guide provided on the scienceXart competition page (<https://www.science.org.au/sciencexart/food-for-thought>) may support yourself and your students in developing the written response required to accompany the scienceXart competition entry.

## Competition Connection

All photos of students work, and typed versions of their reflection can be used as entries into the Australian Academy of Science's scienceXart: food for thought competition. By doing this, students will go into the running to win some awesome prizes. For details on how to enter, visit the website here:

<https://www.science.org.au/sciencexart/food-for-thought>