Year 3

LEARNING RESOURCE

Paddock to Plate: Where does my food come from?

Learning Resource:
Get your hands on my food!

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AGRIFOOD SKILLS AUSTRALIA

Learning Resource: Get your hands on my food!

	Content Descriptor	
Year 3/4 Design and Technologies	Investigate food and fibre production and food technologies used in modern and traditional societies.	ACTDEK012
	Plan a sequence of production steps when making designed solutions individually and collaboratively.	ACTDE018
Year 3 Science	A change of state between solid and liquid can be caused by adding or removing heat.	ACSSU046
Year 3 Science	Science involves making predictions and describing patterns and relationships.	ACSHE050

learn

Learning Outcome

Students in this activity will explore food in a hands-on manner to consider changes raw food goes through to become a familiar food.

- Explore change in food.
- Understand the role of production and food technologies – past and present.
- Expand understanding of the sequence of production steps.
- Learn the role of chemistry and maths in the composition, transformation and production of our food.

note*

Teacher note: It would assist student learning if a paddock to plate process activity (LEARNING RESOURCE 2) was conducted along with this activity. Learning Resource 2 introduces and develops students understanding of the many steps food goes through to get to their 'plate'

work task

Learning and Teaching Sequence

Students are asked to explore their 'food station' to consider how their food is made and produced. Each station is different – some stations explore the chemistry of food production and others the processing of a food item. The stations are an effective means of helping students understand their misconceptions and knowledge gaps, and plus encourages independent inquiry and creation of ideas.

This activity requires students to work in groups of 4 – 5, and rotate through inquiry stations. Depending on time groups can rotate through 1 to 5 stations. Each station should take 15 to 20 minutes and will require a pack up and clean up.

Activity Steps

discuss

Flipping the classroom/Before Activity

1. Ask students: "Do you know where your food comes from and how it is made?"
   - Students should view (at home or at school) the PowerPoint Do you know where your food comes from?(S1), it may stimulate discussion.
   - Follow up discussion could explore why it is important to know where your food comes from, for instance to make good nutritional choices, to appreciate all the people involved in making our food, to make ethical food choices.
   - Students should view at home or at school the PowerPoint Does my food need to change?(S3) This will clarify prior knowledge and reinforce an understanding that fresh food and processed food go through change – some small and others significant

During Food Station Cards

2. Provide students with their first Station Card (S2) and Food Bag and explain instructions for the activity.

note*

Teacher note: the Food Bag is best given after students complete their paddock to plate sequence.

3. Students work in their stations – each station should take around 20 – 25 minutes.

Teacher note: While students are working in groups the following teacher stimulated questions or activities may assist in obtaining a deeper understanding.

- Orange group: Ask students do they know why a navel orange is called a navel orange? Ask students to predict how much orange juice they each will have – they can mark their cups. Have students compare the taste of the juice to store bought juice.
- Grain group: After students have been endeavouring to grind flour using the mortar and pestle help them by grinding in a coffee/spice grinder or grain mill. Show the students how to take the husk off the oats and then roll them with a rolling pin or grain mill.
- Dairy group: Talk with the students about the why the cream turns into butter – that they are forcing the fat globules to separate. How did they know when the butter was produced?
- Sugar group: Provide students with a taste of molasses and have them identify what stage this is extracted. Grind caster or white sugar into pure icing sugar.
- Egg group: Ask students why a fresh egg sinks? What has this to do with the parts of the egg?

4. At the end of each station, groups should be given 5 minutes to discuss and complete a reflection sheet (S3) . This will also enable the group's spokesperson to confidently report back their learning and reflection to the class. This could also become a homework or extension task.

note*

Depending on time students can move through only one or two stations. Students report back at the end of the activity, therefore, learning can be shared.

After Activity – students reflect on their learning by:

5. Sharing their group's ideas, experiences and learning. Discuss the journey of food, the steps and people involved. Why is it good to know where our food comes from?

6. Think pair share: How was food produced in the past? Why has food production change? Do you think all these changes have been good? What impact have these changes had on agriculture? Why do some children and adults have no understanding of where their food comes from?

7. Create: Write a thank you letter to a farmer or draw an advertisement showing the facts regarding where one of the foods explored comes from.

assess

Suggested Assessment opportunities

1. Students individually prepare and present a talk to the class explaining where the food in their lunch box came from?

2. Students research their own food or fibre, and create a paddock to plate process using digital technology. This timeline should be presented as an individual or pair to the class.

3. Students research in greater detail past and current food production practices and compare the differences. Construct a diagram highlighting the differences and write a brief report explaining the development.

4. Students create a BTN (Behind the News) style news report exploring the alarming finding that 27 % of year 6 Australian students think yoghurt grows on trees.

work task

Extension Activities

To further explore food and particularly the science involved in food production some of the following activities could be considered.

- Exploring yeast as a microbe and what occurs when it is put in warm water.
- Making bread – considering flour, yeast and the impact of the cooking process.
- Making ice cream – predicting what will occur with the introduction of cold.
- Making yoghurt or cottage cheese – explaining the impact of warm milk.
- The class creates a wiki or blog that records the foods that they eat during the week and then groups classifies the food products and ranks the food from fresh to highly processed.

discuss

Supporting materials for for Get your hands on my food

- Do you know where your food comes from? PowerPoint
- Do you know where your food comes from? Word Version
- Station Cards PDF
- Station Cards Word Version

  What you will need for station cards each station has its own requirement card to assist teachers with each food bag's preparation.
- Resource information cards PDF
- Resource information cards Word version
- Student reflection handout PDF
- Student reflection handout Word version

FOOD MYTH BUSTING

Food fact or food opinion?

Your task:

- Discuss, research and experiment to prove whether the following claims are food facts or opinions.
- Explore why such claims are made.

Your findings should be reported to the class as either:

- A Myth Buster episode – you can role play your episode or use video.
- As a Current Affairs news report
- As a poster or PowerPoint presentation
- Your choice

Some examples for food myth busting

- Margarine is better than butter
- Homogenised milk is healthier than unhomogenised milk
- All sugar is bad for you
- Humans are meant to be vegetarian
- Low fat or light food products are healthy
- All processed food is bad for you
- Your own myth

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