

CLASSROOM ACTIVITIES STAGE 3 LESSON TWO



Learning Outcomes

- **PD3-6** Distinguishes contextual factors that influence health, safety, wellbeing and participation in physical activity which are controllable and uncontrollable
- **PD3-7** Proposes and implements actions and protective strategies that promote health, safety, wellbeing and physically active spaces
- **MA3-18SP** Uses appropriate methods to collect data and constructs, interprets and evaluates data displays, including dot plots, line graphs and two-way tables
- **MA3-7NA** Compares, orders and calculates with fractions, decimals and percentages



Resources and Preparation

Resources

Videos

- Video 4 – [Growing vegies and friendships in a productive community garden](#) (5:54)
- Video 8 – [The impact of eating local](#) (4:44)
- Video 9 (optional) – [Food is free](#) (5:43)

Worksheets (WS) and Information sheets (IS)

- Worksheet 16 – How far does my food travel?
- Information sheet 1 – Fruit & Vegetable Information
- Information sheet 2 – Community Gardens

Materials

- Computers for research
- Pencils

Preparation

Prior to lesson

- Print out WS 16 – 1 per 2 students
- Print out IS 1 – as needed

SHARING FRUIT & VEG

Students discuss the difference between 'local sources' versus 'international imports'. In pairs, students complete a table of where some fruit and vegetables are mostly produced and calculate their 'food miles'.

Introduction (15 mins)

As a class, discuss where many foods from the supermarket come from. Mention the concept 'local sourcing' versus 'international/interstate import' (IS 1). Talk about where they think local foods come from and if they have any personal experience with 'local food'.

Activity (45 mins)

1. Watch V8 'The impact of eating local' and take notes. Discuss with the students some of the concepts mentioned in the video: monoculture, biodiversity and carbon dioxide/climate change. Discuss how they think eating local would benefit the environment and community.
2. Watch V4 about community gardens.
3. With the students, write down the pros and cons for both local sourcing versus importing fruit and vegetables (see IS 1).
4. In pairs, students can use WS 16 and a computer to look up what country/state produces the highest quantity of different fruit and vegetables that can also be grown in NSW community gardens. Then they can look up the 'food miles' and calculate the carbon dioxide it would take that food to travel to their hometown versus when the food is grown in their own town.

Conclusion (5 mins)

At the end, a class discussion can be held on the issue of growing non-local foods locally. Often, things like temperature and water requirements are not optimal for some foods (e.g. bananas in Sydney need a warmer temperature and would need a greenhouse to grow).

Assessment

- For:** Students understand tasks. Students contribute to group discussion identifying pros and cons for locally sourced food.
- As:** Can students use their technology skills to research required tasks?
- Of:** Were students able to research their allocated food and calculate food miles?

Differentiation

- Extend:** As an extension, students can develop and promote a regular food swap event of the 'food is free' stall at the school. Students can watch V9 'Food is free' about this concept.
- Simplify:** Teacher directed learning.

School/Home Link

At home the students can check where the food in their house has come from.

Duration | 65 minutes



Worksheet 16 | How far does my food travel?

Food miles

Food miles refer to the distance that food travels to get to a consumer, and they're an indication of the resulting emissions that can affect the environment. For each of the foods below, fill in the table below.

- Use the website <https://www.foodmiles.com/more.cfm> to find the food miles from the one country to the next. The website only gives you the food miles to Canberra so you'll need to work out how many miles there are from your school to Canberra (hint: use Google maps). Then add the miles from Canberra to calculate your total distance!
- Then, calculate how much CO₂ those food miles produce. Compare this to how many food miles there are when the food is produced locally.

INFO: 1 kilometre= 0.6 mile 1 food mile produces approximately 1.1 kg of CO₂ for fruit and 2kg for vegetables

| Food | Country where most is produced | Food miles to Canberra | Food miles from Canberra to your school | Total food miles | CO ₂ produced | Food miles from your school to the nearest supermarket | CO ₂ produced | CO ₂ saved when produced locally |
|--------------------|--------------------------------|------------------------|---|-------------------------------|---|--|-------------------------------------|--|
| Potatoes (example) | China | 5,599 miles | 299km = 179.4 miles (299 x 0.6) | 5,778.4 miles (5599+179.4) | 11,556.8kg of CO ₂ (5,778.4 x 2) | 5.8km = 3.5 miles (5.8 x 0.6) | 7kg of CO ₂ (3.5 x 2) | 11,549.8kg of CO ₂ saved! (5,778.4 - 7) |
| Broccoli | | | | | | | | |
| Raspberries | | | | | | | | |
| Mangoes | | | | | | | | |
| Oranges | | | | | | | | |
| Leeks | | | | | | | | |