

# OP awareness lesson plans

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# Stage 5: Lesson 1

<b>Unit:</b> Osteoporosis Unit, Lesson 1	
<b>Syllabus Outcomes:</b> <ul style="list-style-type: none"><li>• Researches and appraises the effectiveness of health information and support services available in the community PD5-2</li><li>• Critiques contextual factors, attitudes and behaviours to effectively promote health, safety, wellbeing and participating in physical activity PD5-6</li><li>• Plans, implements and critiques strategies to promote health, safety, wellbeing and participation in physical activity in their communities PD5-7</li></ul>	
<b>Syllabus Content:</b> <ul style="list-style-type: none"><li>• Critically analyse health information, products and services to promote health, safety, wellbeing and physical activity levels<ul style="list-style-type: none"><li>○ develop and apply criteria to assess health information, products and services and propose actions that may assist young people to select credible sources of information and advice</li></ul></li><li>• Plan, rehearse and evaluate options for managing situations where their own and others' health, safety and wellbeing may be at short-term or long-term risk<ul style="list-style-type: none"><li>○ examine and apply policies and processes for ensuring safe practices when participating in physical activities</li></ul></li></ul>	
<b>Lesson Intentions:</b> <b>By the end of the lesson students should be able to:</b> <ul style="list-style-type: none"><li>• Review what bones are, why they're important and different parts of bones.</li><li>• Analyse the different impacts on bone health and how this impacts individuals.</li><li>• Review safe practice school policies for physical activity and create guidelines for safe practice.</li></ul>	
<b>Learning Activities</b>	<b>Resources</b>

## Introduction

As a class, discuss why they think Osteoporosis Awareness may be important in a high school setting. Brainstorm what it may be, then read the 'Why Osteoporosis Awareness' blurb, as well as watching the introductory video together.

Introduce 'Mrs Cooper' and explain that the online program will be supplementing the Osteoporosis Workbook throughout the lessons.

## Activity One

Guide students through the first two activities online with Mrs Cooper. Combining this with their own research, have them answer the first two questions:

- What are bones?
  - Bones have many critical functions in our body. Bones in our body are living tissue. They have their own blood vessels and are made of living cells, which help them to grow and to repair themselves.
- Why are bones important to us?
  - **Support**
  - **Movement**
  - **Protection.** Your skeleton helps protect your internal organs and fragile body tissues. The brain, eyes, heart, lungs and spinal cord are all protected by your skeleton. Your cranium (skull) protects your brain and eyes, the ribs protect your heart and lungs and your vertebrae (spine, backbones) protect your spinal cord.
  - Provide an environment for marrow where your blood cell **production** takes place
  - **Storage** of minerals (such as calcium)
  - Endocrine **regulation**.

## Online activities - Lesson 1

<https://mskhealthresearch.com/osteoporosis-lesson-1>

### Suggested websites for Activity One:

<https://www.osteoporosis.foundation/health-professionals/about-osteoporosis/bone-biology>.

<https://www.healthline.com/health/bone-health/bone-function#types-of-bone>

<https://sciencing.com/five-main-functions-skeletal-system-5084078.html>

### Activity Two

Have students view the video '[Types of Bones](#)', complete 'Different Types of Bones' and 'Bone Functions' with Mrs Cooper. Then complete the types of bones and their function in the table:

- The different shapes and sizes of bones are dictated by their individual function.
  - Long bones act as levers (as in the arms and legs),
  - Flat bones shield and protect (as in the sternum),
  - Short bones span spaces and give added flexibility (as in the small bones in the wrist and ankle).
  - Irregular bones, vary in shape and protect organs or are attached to tendons (knee cap)
- Points of interest:
  - Bones are continually being broken down and rebuilt. In fact, a human's entire skeleton is replaced about every 10 years.
  - We are born with about 270 soft bones. During childhood and adolescence, the cartilage grows and is slowly replaced by hard bone. Some of these bones later fuse together, so that the adult skeleton has 206 bones.

### Activity Three

Complete the 'Parts of a Long Bone' video and the dropbox diagram with Mrs Cooper. Once finished, review different parts of a bone and their function:

What are the parts of a bone?	What is the function of each bone part?
The Shaft (Diaphysis)	The main part of the bone
The epiphysis	Forms the joint at either end of the bone
Osteoclasts	Bone absorbing cells. The cells that break down old bone tissue.
Osteocytes	The cells that maintain bone tissue by controlling

**Suggested websites for Activity Two:**

<https://www.youtube.com/watch?v=vDjW00S2910>

**\*\* Playback speed is recommended to be 0.75 to slow it down a bit!**

	the mineral and calcium content
Osteoblasts	Bone forming cells. The cells that build bone tissue
Bone marrow	Produces blood cells
Collagen	Provides support and elasticity
Periosteum	Involved in bone growth and repair

**Activity Four**

Using the [Healthy Bones Australia](https://healthybonesaustralia.org.au/) website, research what actions people can take to maintain and improve bone health. Identify the potential impacts on individual's lifestyles if they experience a decrease in bone health.

<b>Factors that maintain bone health</b>	<b>Impact of factor on bone health if not adequately maintained</b>
Calcium	<i>Calcium is required for building and maintaining bone, without it your bones lack strength and structure, reducing bone density and increasing potential osteoporosis risk.</i>
Vitamin D	<i>Vitamin D helps absorb calcium, supports the growth and maintenance of the skeleton and regulates calcium levels in the blood.</i>
Exercise	<i>Exercise assists in maintaining and improving bone density as well as increasing our muscle size, strength and capacity.</i>

**Suggested website for Activity Four**

<https://healthybonesaustralia.org.au/your-bone-health/about-bones/>

### **Activity Five**

As a class, share these findings and discuss why the information from Osteoporosis Australia could or could not be a credible source for information. Use the website link or Learning Resource 1 as a prompt if required, create a class checklist for identifying credible sources when conducting research:



<https://mskhealthresearch.com/evaluating-web-resources>

### **Activity Six**

- Using the class created credible checklist, find three more sources of information on Osteoporosis as well as one source of information that isn't credible and compare the information.
  - Is all the information the same?
  - What's different?

### **Activity Seven**

- In groups, using credible sources, research safe practice school policies for physical activity.
- Identify how the policies found meet the requirements for increasing and maintaining bone health.

<https://mskhealthresearch.com/evaluating-web-resources>

### **Suggested websites for Activity Seven**

<https://education.nsw.gov.au/teaching-and-learning/curriculum/key-learning-areas/pdhp/physical-education/policy-in-practice#Curriculum0>

Policy	Policy Component	Does it meet requirements?
NSW Government	1.5 - 2.5 hours per week of physical activity.	Meets partial exercise requirements.
VIC Government Physical and Sport Education Delivery	100minutes of PE per week, 100minutes of Sport per week.	Meets partial exercise requirements.
ACT Government Physical Education and Sport Policy	Minimum of 150 minutes of moderate to physical activity per week.	Meets partial exercise requirements.

[https://www.education.act.gov.au/publications\\_and\\_policies/School-and-Corporate-Policies/school-activities/physical-education,-sport-and-outdoor-activities/physical-education-and-sport-policy](https://www.education.act.gov.au/publications_and_policies/School-and-Corporate-Policies/school-activities/physical-education,-sport-and-outdoor-activities/physical-education-and-sport-policy)

<https://www2.education.vic.gov.au/pal/physical-and-sport-education-delivery-requirements/policy>

#### **Activity Eight**

- Create five guidelines for a future policy if it was to meet all of the requirements for increasing and maintaining bone health (Exercise, Calcium, Vitamin D).
- It is important to have regular weight-bearing and resistance exercise as well as adequate calcium intake and sufficient Vitamin D.
- Guidelines could include:
  - Integration of the importance of nutrition across the curriculum, regarding the importance of balanced diets for healthy development. 1300mg/day of calcium is the recommended intake for a Year 9 - 10 student. Guidelines could be that canteens implement a 'calcium aware' menu, etc.
  - Encouragement of students spending parts of their school day outside, with slip, slop, slap in mind. To get enough vitamin D, generally, you should try to get 10–20 minutes of sun exposure to your bare skin (face, hands, and arms) outside peak sunlight hours (before 10 AM and after 2 PM) daily. Guidelines could therefore be that roll call is taken outside.
  - It is recommended that children exercise at least 40 minutes a day. This should include sports with a weight-bearing element (cycling and swimming are non-weight-bearing) and/or activities

such as dancing, skipping, running, jumping or walking. Guidelines could therefore be that there are structured weight-bearing activities to be run in schools at lunchtimes.

**Quiz**

Remember to complete the Quiz with Mrs Cooper at the end of the lesson!

**Reflection**





## Learning Resource 1

### Criteria for evaluating websites

Name of site:

Website address:

	Yes / No
<p><b>AUTHORITY</b></p> <p>Is the author identified? Is the author qualified? How do you know the author is qualified?</p> <p>Is there a sponsor of the site? Is the sponsor reputable? How do you know they are reputable?</p>	
<p><b>ACCURACY</b></p> <p>Is the information on the site reliable and error-free? How do you know it is reliable?</p> <p>Is there someone who verifies/checks the information on the site? Is this person qualified to guarantee the accuracy of the information? How do you know this person is qualified?</p>	
<p><b>OBJECTIVITY</b></p> <p>Does the site present a range of viewpoints on the topic/issue? Is the site free of advertising for products and services?</p>	
<p><b>CURRENCY</b></p> <p>Is the page updated regularly? Is the information on the site current? How do you know the information on the site is current?</p>	
<p><b>COVERAGE</b></p> <p>What topics/issues are covered?</p> <p>Does this website offer information that is not found elsewhere? Is this information valuable? Why/Why not?</p> <p>Does the website include in-depth information? Does this website include links to other reputable sites on the same topic/issue?</p> <p>Do you trust the information on this website? Explain why?</p>	

## Stage 5: Lesson 2

<b>Unit:</b> Osteoporosis Unit, Lesson Two	
<b>Syllabus Outcomes:</b> <ul style="list-style-type: none"><li>• Researches and appraises the effectiveness of health information and support services available in the community PD5-2</li><li>• Critiques contextual factors, attitudes and behaviours to effectively promote health, safety, wellbeing and participating in physical activity PD5-6</li><li>• Plans, implements and critiques strategies to promote health, safety, wellbeing and participation in physical activity in their communities PD5-7</li></ul>	
<b>Syllabus Content:</b> <p>Students:</p> <ul style="list-style-type: none"><li>• Evaluate strategies and actions that aim to enhance health, safety, wellbeing and physical activity levels and plan to promote these in the school and community<ul style="list-style-type: none"><li>○ locate a range of physical activities available in the local area that meet individual needs and interests and evaluate their potential to contribute to a lifetime of physical activity</li></ul></li><li>• Design, implement and evaluate creative interventions for enhancing their own and others' fitness levels and participation in a lifetime of physical activity<ul style="list-style-type: none"><li>○ create and evaluate health campaigns, programs or mobile applications that aim to promote fitness or participation in a lifetime of physical activity</li></ul></li></ul>	
<b>Lesson Intentions:</b> <p><b>By the end of the lesson students should be able to:</b></p> <ul style="list-style-type: none"><li>• Describe what Osteoporosis is and what can help build healthy bones to prevent it.</li><li>• Identify cause and effect of Osteoporosis on bones.</li><li>• Critique the Know Your Bones survey and create an age appropriate survey for their peers.</li></ul>	
<b>Learning Activities</b>	<b>Resources</b>

### Introduction (if applicable)

Using labelled Lego blocks, Jenga, cups, cans or other stackable equipment, explain the building blocks of healthy bones.

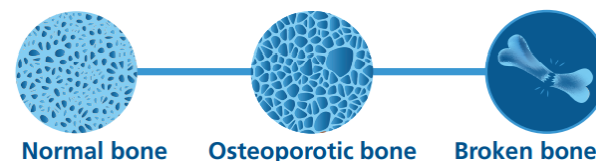
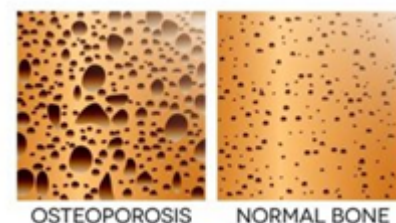
- Have each Lego block/Jenga block/cup or can labelled with calcium, sunshine and weights/resistance machines, explaining that our bones require these factors for growth, development and maintenance:
  - **Adequate calcium intake**, to build and maintain bone strength and flexibility.
  - **Sufficient Vitamin D** through exposure of the skin to sunlight, small amounts of dietary sources and supplementation. Vitamin D is important for bone health because it helps absorb calcium. It also plays a role in:
    - Supporting growth and maintenance of the skeleton
    - Regulating calcium levels in the blood
  - **Regular weight-bearing and resistance exercise** to assist in maintaining or improving bone density.
- Discuss what may happen to the support pyramid without the contribution from each of the building blocks.
  - Introduce the concept of greater holes beginning to form in the building blocks if there aren't contributions from each.
    - This will allow an easier visualisation/description in relation to Osteoporosis/Normal Bone comparison for Activity Two onwards.

Complete 'Building Blocks to Healthy Bones' with Mrs Cooper. Once completed, rank the components in Activity One from most to least important (Exercise, Calcium, Vitamin D)

### Activity Two

- Complete Mrs Cooper's 'What About Unhealthy Bones' and then in small groups, create a mind map of '*Ways to keep our bones healthy*'.
  - Extend the mindmap to '*what might happen if our bones aren't kept healthy?*'
    - This can be recorded in tools such as **Mindmeister or Coggle** or on the class whiteboard if the space in the workbook isn't suitable.
- Have students record the most important points from their mindmap in the workbook.

Labelled lego blocks, Jenga, cups, cans or other stackable equipment, if not a pyramid image is sufficient.



### Suggested websites for Activity Two

- Logins required

<https://coggle.it/>

[https://www.mindmeister.com/mm/signup/basic?return\\_to=https%3A%2F%2Fwww.mindmeister.com%2Ffolders](https://www.mindmeister.com/mm/signup/basic?return_to=https%3A%2F%2Fwww.mindmeister.com%2Ffolders)

**Online activities - Lesson 2**

- *Ways to keep our bones healthy:* adequate **calcium** intake, sufficient **vitamin D** and keep active through regular weight-bearing and muscle strengthening **exercise**.
- *What might happen if our bones aren't kept healthy?:* bones become brittle, increased risk if fall, decreased density, decreased blood cells, increased risk of fractures

### **Activity Three**

- Introduce the concept of Osteoporosis as a class, showing the 3d animated video.
- Complete Mrs Cooper's 'Osteoporosis Face Sheet' in groups of 2, and then using the provided websites, research and answer the following:
  - What is the cause of osteoporosis?
  - What parts of a bone are affected by osteoporosis?
  - What are the effects of osteoporosis?
  - How can osteoporosis be prevented?

### **Activity Four**

- In pairs, have students critique the Know Your Bones Survey: <https://start.knowyourbones.org.au/home>, creating a pros and cons list in relation to the appropriateness of the survey, based on their age group, outlining what is likely to be applicable and what is not.
- From this, students will develop an age appropriate survey for their peers. Have students review the information from Mrs Cooper's 'barriers to healthy bones' before developing.
- Students should include the following:
  - Age appropriate questions
  - Creative and interesting format
  - Ways to communicate results
  - Recommendations of local services available to improve results

### **Mrs Cooper's Quiz**

- Have students complete the five questions of Mrs Cooper's quiz to complete the lesson.

<https://mskhealthresearch.com/osteoporosis-lesson-2>

### **Animated 3D Virtual video for Activity Three**

[https://youtu.be/pkGX\\_RJ\\_sXA](https://youtu.be/pkGX_RJ_sXA)

### **Suggested websites for Activity Three:**

<https://www.iofbonehealth.org/osteoporosis>

<https://healthybonesaustralia.org.au>

**Reflection**

## Stage 5: Lesson 3

**Unit:** Osteoporosis Unit, Lesson 3

**Syllabus Outcomes:**

- Researches and appraises the effectiveness of health information and support services available in the community PD5-2
- Critiques contextual factors, attitudes and behaviours to effectively promote health, safety, wellbeing and participating in physical activity PD5-6
- Plans, implements and critiques strategies to promote health, safety, wellbeing and participation in physical activity in their communities PD5-7

**Syllabus Content:**

Students:

- Evaluate strategies and actions that aim to enhance health, safety, wellbeing and physical activity levels and plan to promote these in the school and community
  - examine current levels of physical activity in the school or community and propose future goals or action plans that will assist themselves and others to maintain regular participation in physical activity
- Design, implement and evaluate creative interventions for enhancing their own and others' fitness levels and participation in a lifetime of physical activity
  - prepare, deliver and critique a health intervention that is designed to promote healthy, safe, active and balanced lifestyles
- Investigate media strategies, marketing and influences associated with health issues affecting young people
  - explore the impact of media messages associated with physical activity, outdoor recreation and sport in Australia and propose how this might influence the health-related behaviours and actions of young people
- Examine the influence of physical activity, outdoor recreation and sport on the lives of Australians.
  - explore the importance of social and cultural practice on individual and community participation in physical activity and participate in a range of physical activities from the Asia region

**Lesson Intentions:**

**By the end of the lesson students should be able to:**

- Define physical health, inline with WHO and identify the characteristics of someone who has good physical health.
- Outline required physical activity Australian guidelines for children and compare these globally.
- Create a physical activity four week program to meet the Australian guidelines for a young student.

**Learning Activities**

**Resources**

### Activity One

- Students are to construct a definition of physical health by exploring a range of community and accepted definitions.
- Discuss the [WHO definition of health](#) as provided by Mrs Cooper: “Health is a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity” and discuss why WHO may have arrived at this definition.
  - From this discussion, Think, Pair, Share – and have students develop their own personal definition of health.
    - Share paired definitions with the class.

### Activity Two

- Using these definitions, find three marketing campaigns, images or influences that would positively impact health and three that would negatively impact health.
  - Justify why these have been chosen and how they impact.

### Activity Three

- Complete Mrs Cooper’s ‘Good Health vs Poor Health’ table and then using Padlet or the class whiteboard to record answers, have students identify the characteristics of someone who shows good physical health to someone who does not and how this is achieved.
  - For example
    - Good physical health:
      - Exercises often, eats a well balanced diet, sleeps well, limited to no smoking and alcohol consumption, lack of sickness, lack of injuries
      - Achieved by: accessibility to resources for exercise - community sport, gyms, money to purchase nutritious food, education for the dangers
    - Poor physical health:
      - Doesn’t exercise often, doesn’t have a balanced diet, poor sleep, often sick, often injured
- Have students record the most common responses in their workbooks.

### **Website for Activity One:**

<https://www.who.int/about/who-we-are/constitution>

### **Suggested website for Activity Two:**

<https://padlet.com/>

### **Online activities Lesson 3**

<https://mskhealthresearch.com/osteoporosis-lesson-3>

### **Suggested website for Activity Three:**

<https://padlet.com/>

- Compare the developed lists to other countries around the world where good and poor physical health may be impacted by social or cultural practices within different communities.

#### **Activity Four**

- Have students complete Mrs Cooper's 'Physically Healthy Day', and identify what a physically healthy students day would look like. Have students record the examples in the table provided.
- Once the table is filled in, complete the 'Sedentary Activities' slide with Mrs Cooper.

<b>Health Dimension</b>	<b>Guideline</b>
<i>Physical activity</i>	Accumulating 60 minutes or more of moderate to vigorous physical activity per day involving mainly aerobic activities. Activities that are vigorous, as well as those that strengthen muscle and bone should be incorporated at least 3 days per week. Several hours of a variety of light physical activities should also be incorporated.
<i>Screentime</i>	Limiting sedentary recreational screen time to no more than 2 hours per day.
<i>Sedentary activities</i>	Breaking up long periods of sitting as often as possible.
<i>Sleep</i>	An uninterrupted 9 to 11 hours of sleep per night for those aged 5–13 years and 8 to 10 hours per night for those aged 14–17 years and consistent bed and wake-up times.

- In pairs, have students research what these guidelines look like in other countries across

#### **Websites for Activity Four**

<https://www.health.gov.au/health-topics/exercise-and-physical-activity>

[https://www1.health.gov.au/internet/main/publishing.nsf/Content/F01F92328EDADA5BCA257BF0001E720D/\\$File/brochure%20PA%20Guidelines\\_A5\\_Families.PDF](https://www1.health.gov.au/internet/main/publishing.nsf/Content/F01F92328EDADA5BCA257BF0001E720D/$File/brochure%20PA%20Guidelines_A5_Families.PDF)



the globe. Compare the guidelines of a minimum of two other countries.

### **Activity Five**

- Using the recommended physical activity guidelines completed in Activity Four, as well as Mrs Cooper's 'Activity Ideas', students identify what types of physical activities could be completed to meet the guidelines, what kind of physical responses the body would have to each of the activities and how they could incorporate these guidelines into their week for Australia and one of their other selected countries.

<b>Guideline</b>	<b>Possible activities to meet guideline</b>	<b>Physical responses of the body</b>
<i>60min moderate to vigorous activity, involving mainly aerobic.</i>	<i>Running, cycling, zumba</i>	<i>Improve cardiovascular endurance.</i>
<i>Activities that strengthen muscles and bones 3 days/week.</i>	<i>Weights sessions, pilates.</i>	<i>Improved bone strength, stability and muscular endurance.</i>

- Students then outline how the guidelines above could be incorporated into a student in Australia's week compared to one the countries selected in Activity Four.

### **Activity Six**

Using the research of recommended physical activity guidelines, combined with the information about the importance of exercise for reducing Osteoporosis in the website provided, students create a recommended training program for themselves or a young family member (brother/sister/cousin), selecting five activities and exercises best suited for building healthy bones.

The program needs to outline:

- The age of the family member,

### **Suggested websites for Activity Five:**

<https://www.aihw.gov.au/reports/physical-activity/physical-activity-across-the-life-stages/contents/summary>

<https://www.sportaus.gov.au/findyour30>

<https://www1.health.gov.au/internet/main/publishing.nsf/Content/health-publth-strateg-phys-act-guidelines#:~:text=Be%20active%20on%20most%2C%20preferably,and%20vigorous%20activities%2C%20each%20week.>

- Five varied types of activities/exercises suited to the family member,
- Why the activities are good for building healthy bones,
- Location suggestions for activities/exercises,
- Further recommendations and suggestions for the future.

**Mrs Cooper's Quiz**

- Remember to have students complete the quiz with Mrs Cooper at the end of the lesson!

**Reflection**

## Stage 5: Lesson 4

<b>Unit:</b> Osteoporosis Unit, Lesson 4	
<b>Syllabus Outcomes:</b> <ul style="list-style-type: none"><li>● Researches and appraises the effectiveness of health information and support services available in the community PD5-2</li><li>● Critiques contextual factors, attitudes and behaviours to effectively promote health, safety, wellbeing and participating in physical activity PD5-6</li><li>● Plans, implements and critiques strategies to promote health, safety, wellbeing and participation in physical activity in their communities PD5-7</li></ul>	
<b>Syllabus Content:</b> Students: <ul style="list-style-type: none"><li>● Analyse the contextual factors that have an impact on the health, safety, wellbeing and participation in physical activity of individuals and groups, including Aboriginal and Torres Strait Islander Peoples<ul style="list-style-type: none"><li>○ explore sources of nutritional information and investigate influences on food choices, diet and habits, eg families, advertising</li></ul></li><li>● Evaluate strategies and actions that aim to enhance health, safety, wellbeing and physical activity levels and plan to promote these in the school and community<ul style="list-style-type: none"><li>○ prepare, deliver and critique strategies for healthy eating and healthy food selection</li></ul></li></ul>	
<b>Lesson Intentions:</b> <b>By the end of the lesson students should be able to:</b> <ul style="list-style-type: none"><li>● Identify what components need to supplement physical activity to achieve physical health.</li><li>● Describe how a child's diet impacts their healthy bones and outline dietary requirements.</li><li>● Create an advertisement to inform of the importance of diet in building healthy bones.</li></ul>	
<b>Learning Activities:</b>	<b>Resources:</b>

### Activity One

- As a class, discuss what else is needed to supplement a child's health, in addition to the health dimensions and guidelines as outlined in Lesson Three (physical activity, sedentary time, sleep, screentime), to ensure their bones are healthy and what community or school programs exist to encourage and support these choices in Metropolitan areas.
  - *Examples*
    - *Diet:*
      - *Healthy Harold:*  
<https://www.lifeeducation.org.au/about-us/healthy-harold>
      - *2&5:* [https://healthywa.wa.gov.au/Articles/F\\_I/Go-for-2-and-5](https://healthywa.wa.gov.au/Articles/F_I/Go-for-2-and-5)
      - *Crunch and Sip:* <https://www.crunchandsip.com.au/>
    - *Vitamin D:*
      - *PDHPE classes outside*
- Compare these programs to other programs rurally. Research what community or school programs exist in Metropolitan areas to encourage and support these choices, eg: Healthy Harold.

### Activity Two

- Using Mrs Cooper's 'Cultural Differences' slides to assist, compare and contrast the [Australian Guide to Healthy Eating](#) with the [Aboriginal and Torres Strait Islander Guide to Healthy Eating](#) and answer the following:
  - What are the similarities?
  - What are the differences?
  - List three barriers Aboriginal and Torres Strait Islanders may have to meeting the Guidelines.

### Activity Three

- Using the resource below as well as Mrs Cooper's 'Australian Dietary Guidelines', have students identify the five Australian dietary guidelines and record responses in the table:
  - <https://www.eatforhealth.gov.au/guidelines/about-australian-dietary-guidelines>

### Suggested websites for Activity One

<https://dietitiansaustralia.org.au/smart-eating-for-you/smart-eating-fast-facts/healthy-eating/health-and-well-being-of-aboriginal-and-torres-strait-islander-people/>



### Online activities Lesson 4

<https://mskhealthresearch.com/osteoporosis-lesson-4>

- Guideline 1: To achieve and maintain a healthy weight, be physically active and choose amounts of nutritious food and drinks to meet your energy needs
- Guideline 2: Enjoy a wide variety of nutritious foods from these five groups every day:
- Guideline 3: Limit intake of foods containing saturated fat, added salt, added sugars and alcohol
- Guideline 4: Encourage, support and promote breastfeeding
- Guideline 5: Care for your food; prepare and store it safely

#### **Activity Four**

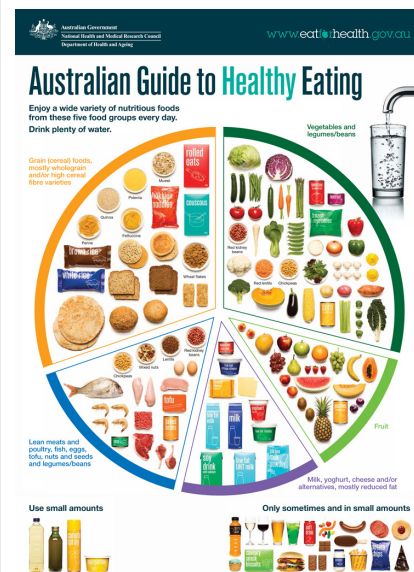
- Using the website below, as well as Mrs Cooper's 'Calcium and Bones' slide, research how a person's calcium intake impacts their healthy bones and what food groups are most important for growing healthy bones, recording answers in the table.

<https://healthybonesaustralia.org.au/your-bone-health/calcium/>

#### **Activity Five**

In pairs, based on the training plan developed in Lesson Three, create a dietary plan for the young student to supplement the outlined exercise regime, using the Australian Guide to Healthy Eating and the websites provided for assistance. Mrs's Cooper's 'Making Healthy Choices' will also be handy. This can be presented in any format of choice.

- *Australian Guide to Healthy Eating recommendations:*
  - Plenty of vegetables, including different types and colours, and legumes/beans
  - Fruit
  - Grain (cereal) foods, mostly wholegrain and/or high cereal fibre varieties, such as breads, cereals, rice, pasta, noodles, polenta, couscous, oats, quinoa and barley
  - Lean meats and poultry, fish, eggs, tofu, nuts and seeds, and legumes/beans
  - Milk, yoghurt, cheese and/or their alternatives, mostly reduced fat (reduced fat milks are not suitable for children under the age of 2 years)



#### **Suggested websites for Activity Three:**

<https://www.ais.gov.au/nutrition/resources>

<https://healthybonesaustralia.org.au/your-bone-health/calcium/>

- And drink plenty of water.

**Activity Six**

- Once Activity Five is completed, have students annotate the program, outlining what barriers may exist within the training program if it was applied rurally and internationally.
- As well as this, record what modifications could be implemented to adapt to these potential barriers.

**Mrs Cooper's Quiz**

- Remember to have students complete the quiz with Mrs Cooper at the end of the lesson!

**Reflection**