APAL

STEM in the Orchard Student Workbook

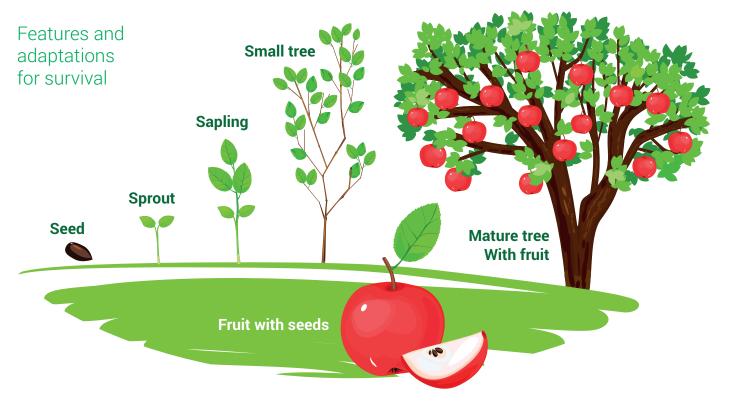
Australia produces a large range of apples, but among the most popular are Granny Smith, Red Delicious, Pink Lady, Fuji and Gala.

There are now also many new apple varieties emerging on supermarket shelves that taste and look great, including Jazz™, Bravo®, Kalei®, Eve™, Modì®, envy™, Rockit™, Kanzi® and yello®.

There is so much choice! Today we are exploring The Orchard at Montague and you will taste and learn about the different fruit varieties. Record your information in the table below.

NAME:	Draw a picture of your fruit.
It tasted	
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It tasted	
NAME:	Draw a picture of your fruit.
It tasted	
My favourite fruit variety was:	





List the features and adaptations of an apple tree that enable it to survive.

What environmental conditions affect the growth of an apple tree?



The future of food

Thanks to cold store technology, Australian consumers can enjoy locally grown apples and pears 12 months of the year. In fact, 99.7 per cent of all apples stocked in Australian retailers come from Australian orchards and are internationally renowned as some of the finest in the world. As an industry, apples and pears are worth over \$632M annually and create thousands of jobs in regional areas of the country.

Apples and pears are also increasingly being used in exciting value-add products, such as ciders, perry (pear cider), sparkling juices, candy and toffee apples, apple jams, freeze-dried and semi-dried products, air-dried chips, cider vinegar, purees and baby foods, and even apple flour made from the abundant fibre after juicing.

The future of food production is in our hands. What would happen if climate change severely affected all Australian orchards and they had to close?

In the table below, outline the positive and negative impacts.



(production, distribution, employment)



Positives

Negatives

Food supply and healthy eating



Positives

Negatives

Impacts on communities

(social and emotional)



Positives

Negatives



Food waste alternatives

Food waste has been a global problem in both the past and present. We can change our behaviour towards food waste for a brighter future by being conscious consumers and taking action.

Write the keywords and some of your own words in the three sections below (PAST, PRESENT, FUTURE). You can use the same words several times.

Keywords: composting, worm farms, organics collection, landfill, chooks, food bank, buried, alternative products, change behaviour, education, recycle, charity.

PAST:

Where did food waste go?



PRESENT:

Where does food waste go?



FUTURE:

The solution to food waste.





Innovation

The amazing packing and distribution centre at Montague provides an insight into the latest innovative technology, which has expanded the fruit facility and it now has the capacity to process more than 280 million pieces of fruit each year!

Make a list of the new technology you have seen today. The pictures below will help you out.

1.

2.

3.

4.

5.

6.

7.







Apple and pear growing regions



Reference: apal.org.au