



The Economic\$ of Apple\$

Victorian Essential Learning Standards

Use of this learning and teaching activity may contribute to achievement of elements of the Standards in Mathematics 3 - 5, Humanities-Economics 4 & 5, English 3 - 5, Science 4 & 5

Summary

In this activity students compare apple varieties, survey consumer preferences with surveys and use their data to determine market trends. Based on consumer and producer needs, students develop marketing plans to increase the profitability of their orchard or apple variety.

Background notes for teachers

Breeders consider the needs and wants of growers and consumers when they develop new apples. They look for particular qualities in existing apple varieties and 'tweak' them by crossing them with other apple varieties to make new varieties. Consumer considerations include: taste, colour, nutritional value and crispiness. Growers' considerations include pest-resistance, climate suitability and shelf/cool storage life. By meeting these needs and wants with tasty, easy-to-grow apple varieties, breeders can increase profits in the apple industry. Profits can be further increased with clever marketing, to develop consumer interest in the apple as a product.

Developing new varieties of apples is an example of how science integrates with other industries to meet consumer and producers' needs and wants. Orchardists' work involves more than growing and picking fruit. To remain profitable they must keep up with market trends by reading industry journals and articles in order to better meet market needs.

Useful terms

Strategic marketing: People in charge of selling the product research the needs and wants of consumers, and then target specific groups of people (for example, 25-42 year olds, women, retirees) in their advertising to increase their profit.

Product quality controls: Products that don't meet certain criteria (for example, due to damage or size) are put aside and not sold to mainstream retailers. Instead, they may be sold as 'seconds' from other outlets.

Materials

3-4 apples each of five commercially available apples - enough for students to sample all of the apples. (Keep the receipt or record the price/kg at time of purchase.)

Knife, chopping boards, plates, copies of the worksheet.

Part A: What do I like?

1. Suggested introduction tasks and questions:
 - Homework task: Ask 4 people about their favourite type of apple and the qualities they most like (ie. crispy, colour). Then, make a list of 10 apple qualities. Answers may include: taste (sweet, tart, sour), texture (juicy, crisp, floury, hard), skin (colour, tough, shiny), size and shape, flesh colour, smell, do they brown quickly when exposed to air? How are they best eaten: fresh or cooked?
 - Make a class list of apple qualities. Do any of the words mean the same thing? eg. crispy/crunchy.
 - If you were an orchardist, would this information be important to you? What other factors may you consider when planting new fruit trees? eg. pest resistance, water requirement, climate suitability.
2. As a class, develop a table to compare apple varieties based on 5 characteristics from the apple quality list above (refer to Worksheet: The Economics of Apples).
3. Students fill in the table as they taste a variety of commercially available apples. Determine a standard rating system (stars, ticks, score out of 5) for the class to use. If applicable, at each tasting station leave one whole apple (to observe size and shape) and one slice of apple to determine if the apple discolours quickly.
4. When finished tasting, ask students to rank the apples from favourite (5 points) to least favourite (1 point).
5. Next, tell students the price of each apple. Does this affect their preference? Fill in the revised preference row. Tally the results to determine class preferences.

Part B: What do others like? Looking at market trends

In groups of 3 or 4, students use their worksheets to look for trends in the data. What qualities did the preferred apples have? Write statements based on the data, for example, “Our data suggests our group prefers crispy apples” or, “Our data suggests females in our group will pay more for apples if they are sweet and crispy.” Discuss as a class. Were there differences between groups? Are there any class trends? How do marketers determine market trends? (They ask a wide selection of people questions to determine their likes and dislikes). How do they get their information? (Telephone, mail and internet surveys.)

Part C: Turning trends into profits

Allocate groups of 2-3 students with a type of apple. Give groups the role of **product managers** or **orchardists**.

Product Managers: How could you market this apple to consumers? Use information from Part B to brainstorm three ideas, then choose one idea to develop further and present to the class. Students might choose to market their apple on websites, sponsor cooking shows or limit the supply of the apple to increase the demand (and price!).

Orchardists: This is the main apple grown at your orchard. How can you use the market trends to increase the profitability of your land? Use information from Part A and B to brainstorm three ideas, then choose one to develop further and present to the class. Students might decide to plant more popular apple varieties or vary their packaging to include a serving suggestion. Encourage creativity in developing a plan, based on research into market trends.

Marketing fruit

www.apal.org.au/marketing-domestic-marketing-programs.cfm

www.pearfest.com.au/

www.oneadaysuperfood.com.au/

www.theaustralian.news.com.au/story/0,20867,10823439-27644,00.html