Future Options

You need: a computer, classmates

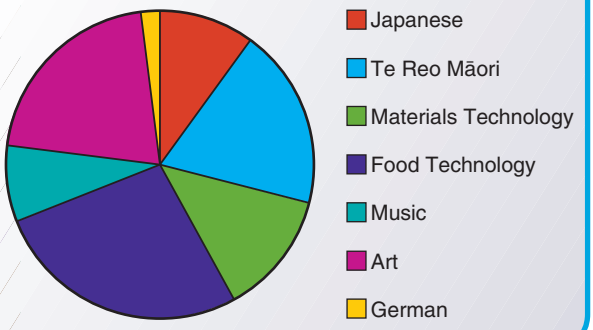
ACTIVITY

Ms Thomas, principal of Riverside High School, visits the local intermediate school to survey year 8 students about the options they would like to take next year. She asks them each to choose *two* options. Here are the results of her survey:

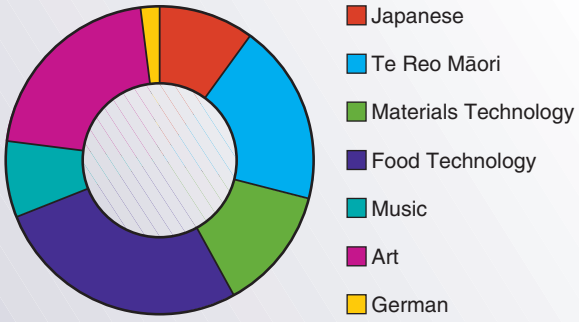
Option	Number of students
Japanese	20
Te Reo Māori	39
Materials Technology	26
Food Technology	54
Music	16
Art	43
German	4

Ms Thomas asks you to enter this data into a spreadsheet and to turn it into a graph. You are not sure which kind of graph will be best, so you create these four:

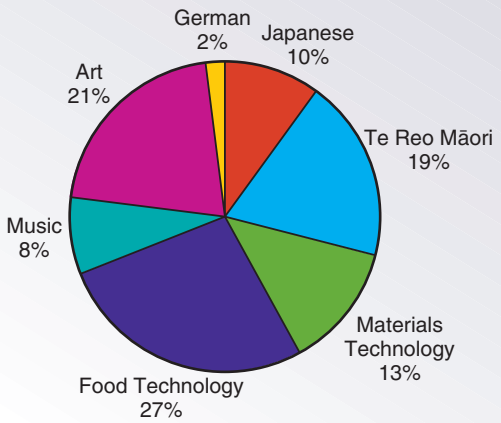
i. Student Option Choices



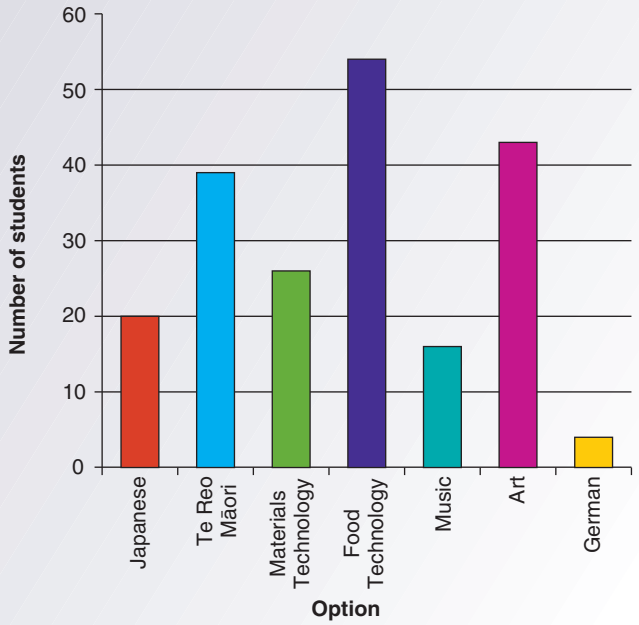
ii. Student Option Choices



iii. Student Option Choices



iv. Student Option Choices



1. Discuss with a classmate which of the four graphs best shows the information Riverside High School needs when planning next year's classes. What are your reasons?

2. How many students did Ms Thomas survey?

3. 50 year 8 students were away on a field trip when Ms Thomas did her survey. She asks you to predict what options the absent students are likely to take.
   - **a.** Discuss with a classmate how you could make such a prediction.
   - **b.** Write down your predictions for the 50 students.
   - **c.** Put your predictions, together with Ms Thomas's data, into a spreadsheet.
   - **d.** Create a graph for Ms Thomas that clearly shows how many students are likely to want to take each option.

4. **a.** Do you think the school will run a German class next year? Why or why not?
   b. How many food technology classes will probably be needed?

5. **a.** Survey *your* class to see what options they would like to take next year.
   b. Enter these results onto a spreadsheet and display them in a bar graph.
   c. What does your graph tell you?