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Maths Week/ Wiki Pāngarau 2025

Survivor Series/Kia Mōrehurehu

Day 4 Level C

For students

What to do for students

1 **You can work with one or two others. Teams can be different each day.**

2 **Do the tasks and write any working you did, along with your answers, in your maths book.**

3 **Your teacher will tell you how you can get the answers to the questions and/or have your work checked.**

4 **When you have finished each day, your teacher will give you a word or words from a proverb. You could ask your teacher to explain what a proverb is.**

5 **At the end of the week, put the words together in the right order and you will be able to find the complete proverb! Your teacher may ask you to explain what the proverb means.**

6 **Good luck.**

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BIRDS AND BUTTERFLIES

In this activity you will work in groups of two or three to collect data about a New Zealand bird. Using this data and data collected about other New Zealand birds, you and your group will undertake a statistical investigation.

Activity 1 – Collecting data

Your group collects data for the bird you have been allocated by the teacher. The variables and definitions are:

Main body colour: the body colour, or if the bird has two or more colours, the colour that is more common than the others

Beak colour: the colour of the beak

Length: the length of the bird in centimetres (cm)

Weight: the weight of the bird in grams (g)

Food: the type of food the bird eats e.g., worms, insects, fruits, nectar, invertebrates, spiders, leaves, flowers

Conservation Status: the conservation status of the bird e.g., not threatened, at risk – recovering, at risk – declining, threatened – nationally endangered

1. For the bird allocated to your group, find the information you need about the bird using the New Zealand Birds online website.

The direct links to the bird information are in the table below. Alternatively, your teacher might provide this information in a paper form.

	Name of the bird	Link on New Zealand Birds Online
13	Variable Oystercatcher (Tōrea pango)	https://www.nzbirdsonline.org.nz/species/variable-oystercatcher
14	Pūkeko	https://www.nzbirdsonline.org.nz/species/pukeko
15	Northern Royal Albatross (Toroa)	https://www.nzbirdsonline.org.nz/species/northern-royal-albatross
16	New Zealand Dotterel (Tūturiwhatu)	https://www.nzbirdsonline.org.nz/species/new-zealand-dotterel
17	Gannet (Tākapu)	https://www.nzbirdsonline.org.nz/species/australasian-gannet
18	Little Penguin (Kororā)	https://www.nzbirdsonline.org.nz/species/little-penguin
19	Kākāpō	https://www.nzbirdsonline.org.nz/species/kakapo

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20	Takahē	https://www.nzbirdsonline.org.nz/species/south-island-takahe
21	Weka	https://www.nzbirdsonline.org.nz/species/weka
22	Sacred kingfisher (Kōtare)	https://www.nzbirdsonline.org.nz/species/sacred-kingfisher
23	Blue duck (Whio)	https://www.nzbirdsonline.org.nz/species/blue-duck
24	Shining Cuckoo (Pīpīwharauroa)	https://www.nzbirdsonline.org.nz/species/shining-cuckoo

Your teacher will provide a page of data cards to fill out.

- Fill out one data card (example to the right), checking the information carefully.
- Make an exact copy of your data card in the remaining 11 data cards on the page.
- Cut up the data cards so that there are 12 copies of the data card for the same bird.

X. Common name given
Scientific name given
Main body colour:
Beak colour:
Length:
Weight:
Food:
Conservation Status:

The data cards already include the bird's common and scientific names.

2. Share the data cards with the other groups in your class. Each group needs one data card for each of the birds numbered 13-24.

Activity 2 – Undertaking a statistical enquiry using the birds data cards

Your teacher will provide each group with a sheet that has 12 more data cards for New Zealand birds.

1. Cut these up so your group has 24 data cards altogether.
2. Decide on which variable to explore, if there is time explore one categorical variable, e.g., main body colour, beak colour, food or conservation status; and one numerical variable e.g., length or weight.
3. Write an investigative question to answer about the variable.
   e.g., What are the main body colours (beak colours/foods that your bird eats/conservation statuses) of these New Zealand birds?
   e.g., What are the lengths or weights of these New Zealand birds?
4. Using the data cards make a data visualisation to show the data for the variable you are exploring.
5. Write two statements about what the data shows.
6. Use the evidence (data visualisation and statements) to answer your investigative question(s).