

The following examples of student work illustrate achievement at the mathematics standards for years 3 and 4.

## Are We Ready?

The task used in this illustration was part of a year 3–4 social sciences unit on how people cope in natural disasters. After listening to podcasts of children's stories about the Christchurch earthquakes, one student asked: "What would happen if we had an earthquake and had to stay at school?"

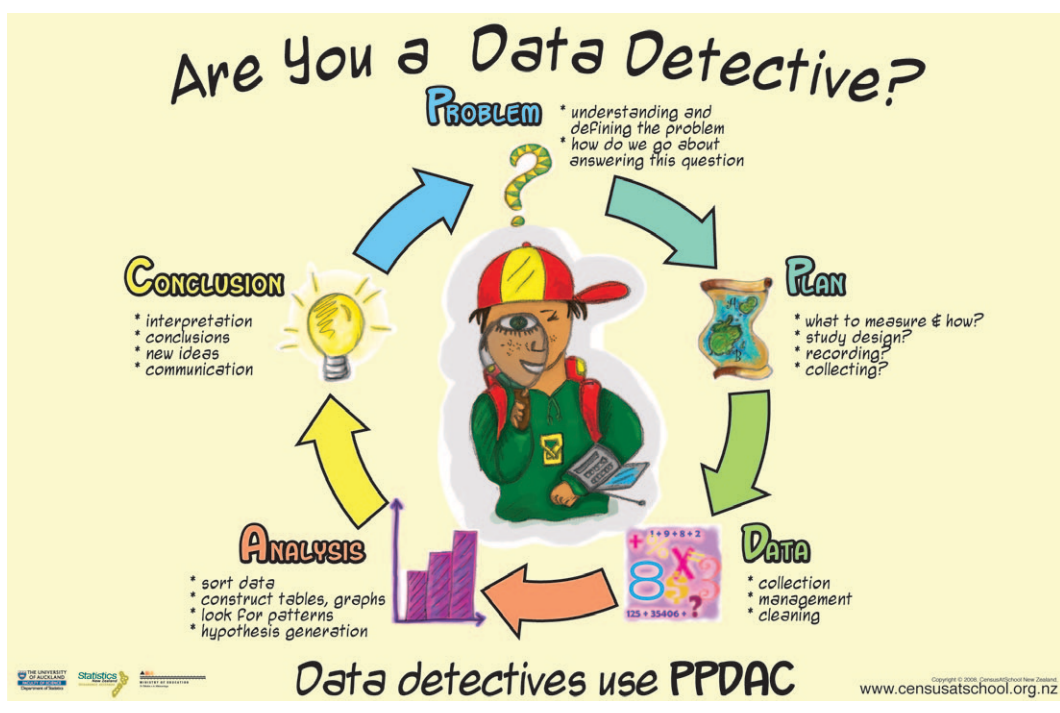
After class discussion, the teacher set the following task on what supplies would be needed if everyone had to stay at school in an emergency.

The task relates to achievement objectives for Statistics from the mathematics and statistics learning area in *The New Zealand Curriculum*.

### Are We Ready?

Work in small groups to:

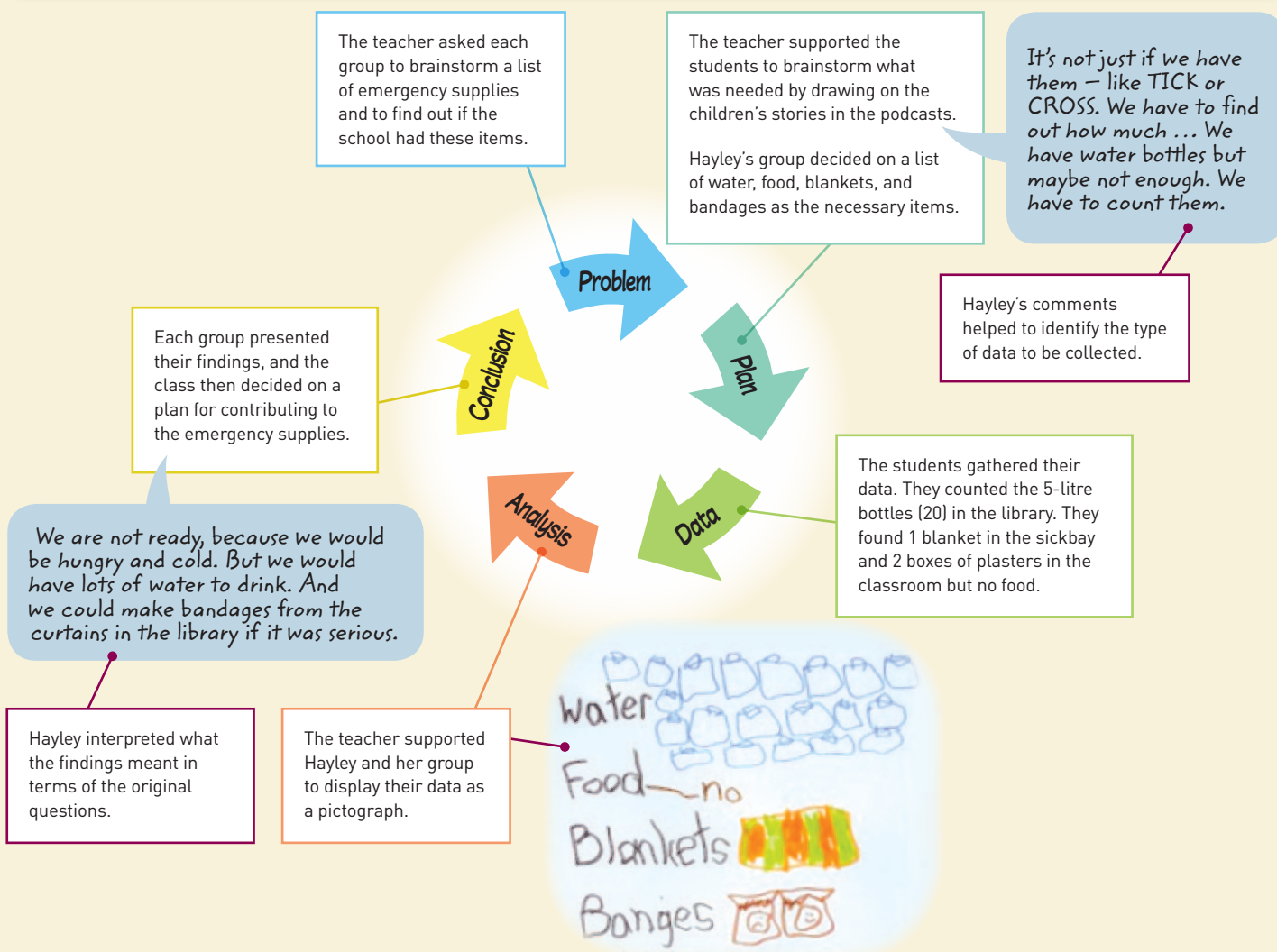
1. brainstorm what emergency supplies the school should have in case everyone has to stay overnight
2. check to see if these things are in the school
3. display the results of your investigation and be ready to explain them to the class.



Some features of students' work used to make judgments in relation to the mathematics standards are described below.

### Are We Ready?

New Zealand Curriculum: Level 2	Mathematics Standard: After three years at school
In solving problems and modelling situations, students will:	
<b>Statistics</b> <ul style="list-style-type: none"> <li>conduct investigations using the statistical enquiry cycle:                             <ul style="list-style-type: none"> <li>posing and answering questions</li> <li>gathering, sorting, and displaying category and whole-number data</li> <li>communicating findings based on the data (statistical investigation)</li> </ul> </li> </ul>	<b>Statistics</b> <ul style="list-style-type: none"> <li>investigate questions by using the statistical enquiry cycle (with support):                             <ul style="list-style-type: none"> <li>gather and display category and simple whole-number data</li> <li>interpret displays in context</li> </ul> </li> </ul>



### Discussion

This task provides some of the evidence needed to show that Hayley is achieving at early curriculum level 2 and the year 3 standard in Statistics. She has demonstrated that, within a small group context and with teacher support, she is able to investigate a question by using the statistical enquiry cycle. She is able to gather and display category data and interpret the display in the context of the problem. She participated in her group presentation by adding her conclusion.

### Are We Ready?

#### New Zealand Curriculum: Level 2

In solving problems and modelling situations, students will:

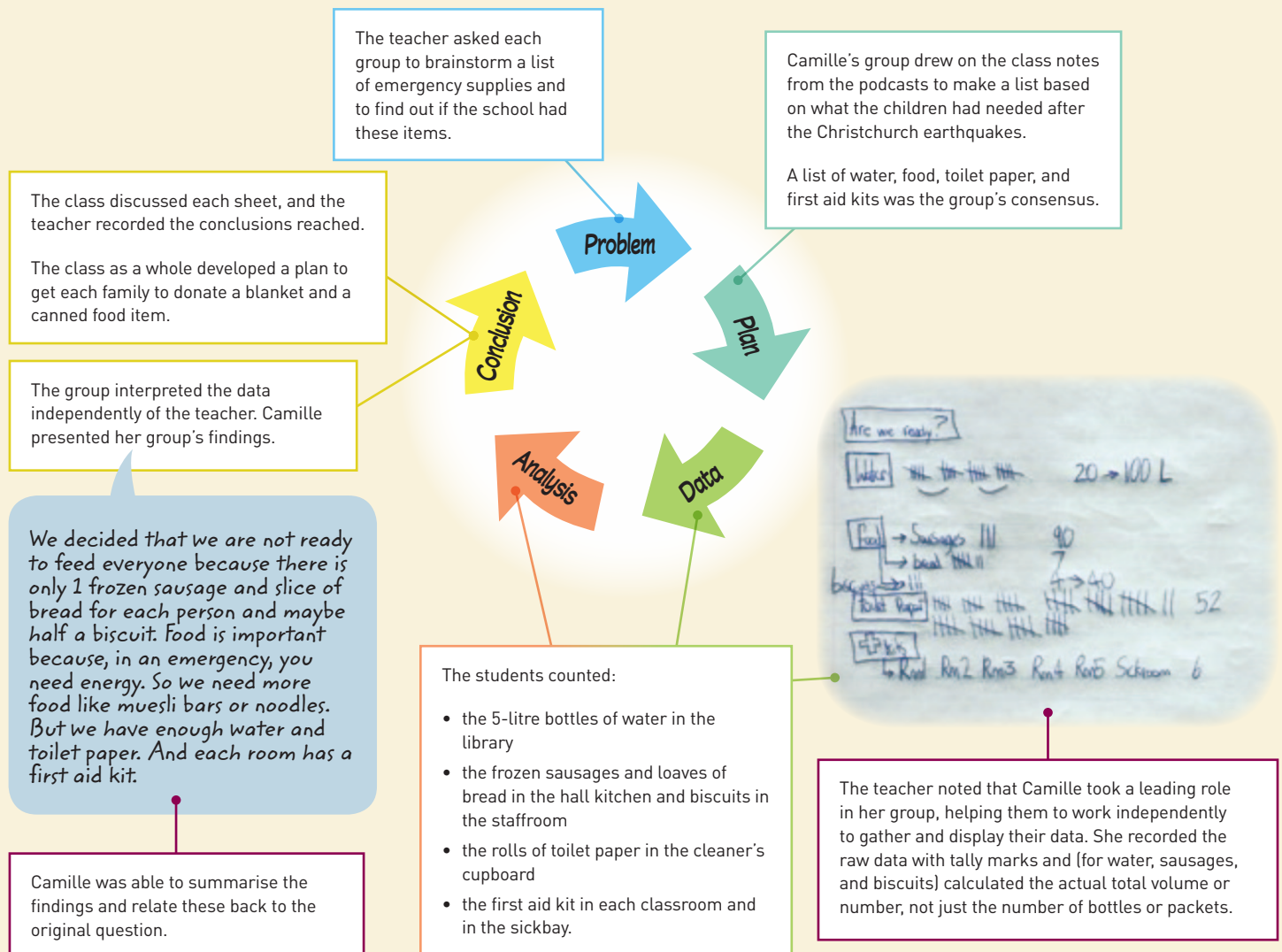
##### Statistics

- conduct investigations using the statistical enquiry cycle:
  - posing and answering questions
  - gathering, sorting, and displaying category and whole-number data
  - communicating findings based on the data (statistical investigation)

#### Mathematics Standard: By the end of year 4

##### Statistics

- investigate questions by using the statistical enquiry cycle independently:
  - gather and display category and simple whole-number data
  - interpret displays in context



### Discussion

This task provides some of the evidence needed to show that Camille is achieving at curriculum level 2 and the year 4 standard in Statistics. She has demonstrated that, working within a small group, she is able to investigate a question using the statistical enquiry cycle independently. She is able to gather and display category data and interpret the display in context.