# Chapter 4

# Exercise 4.1

Emptying your pockets, etc. produces a heap of objects. By categorizing them and naming the category, you are defining the class to which they belong. By dividing them into subcategories you are defining specialized classes. By pulling items apart, you are defining an aggregation (or composition) relationship between a whole class and its parts.

## Exercise 4.2

#### Part a

StudentModuleResults
studentName
studentNumber
moduleName
moduleCode
result

### Part b

Clothes
itemNumber
garmentDescription
colour
sizeRange
price

#### Part c

Book
ISBN
title
author
publisher
yearOfPublication

# Exercise 4.3

- a Banking system: Customer, Account, CurrentAccount, DepositAccount, OnlineAccount, PersonalAccount, BusinessAccount
- b Drawing package: Shape, Triangle, Circle, Rectangle, Square, Line
- Library system: Book, Member, Loan, Reservation