Application Exercise 1



PART A What do you notice about the screenshot above? What questions do you have? e.g. What...? Who...? Why...? Which...? How...?

PART B For the following question, what are your estimates? What numbers would be too high or too low?

A student forgot to charge their phone and asked their advisor if they could charge it in the office. When should they pick it up?

PART C Which strategies could you use to answer the question?





Do I know a similar problem?

Guess, check and improve

Try all possibilities



Break the problem

into smaller parts

000 700

Try a simpler problem



Draw a picture

or graph





Act it out

04004

Look for a pattern

Make a list

or table

Write an equation

500

Work backwards



Seek an exception

What information or equipment do you need?

The student checked on the phone during advisory:



PART D Decide which option best answers the question:

When should they pick it up?

- (A) 10:00
- (B) 10:24
- (C) 10:30
- (D) 11:40

Application Exercise 2

Rank	Country	Gold	Silver	Bronze	Weighted Medals*	Population
10	Australia	8	11	10	64	23,781,169
11	Netherlands	8	7	4	50	16,936,520
18	Cuba	5	2	4	28	11,389,562
24	Switzerland	3	2	2	18	8,286,976
29	Sweden	2	6	3	23	9,798,871
32	Serbia	2	4	2	18	7,098,247
37	Slovakia	2	2	0	12	5,424,050
39	Azerbaijan	1	7	10	28	9,651,349
42	Armenia	1	3	0	10	3,017,712
54	Kosovo	1	0	0	4	1,859,203

At the 2016 Rio Olympics, Australia ranked 10th in the medal table:

*gold = 4, silver = 2, bronze = 1

PART A What do you notice about the table of data above? What questions do you have?

e.g. What...? Who...? Why...? Which...? How...?

PART B For the following question, what are your estimates? What numbers would be too high or too low?

Can you predict the medals won by a country with a population of 65,138,232?

PART C Which strategies could you use to answer the question?





Do I know a similar problem?

Guess, check and improve

Try all possibilities



Break the problem

into smaller parts



Try a simpler problem



Draw a picture

Make a model



Act it out

04004

Make a list

or table



or graph

600



Seek an exception

Look for a pattern

Write an equation



What information or equipment do you need?

PART D Decide which option best answers the question:

Can you predict the medals won by a country with a population of 65,138,232?

- (A) 27 gold, 26 silver, 24 bronze
- (B) 27 gold, 23 silver, 22 bronze
- (C) 27 gold, 23 silver, 17 bronze
- (D) 27 gold, 20 silver, 17 bronze

EXTRA Which country in the table had the best medal result?