CHAPTER 1

Working Situations

ACTIVITY OVERVIEW

ACTIVITY 1
Department store

ACTIVITY 2
Café

ACTIVITY 3
Printing centre

ACTIVITY 4
Pet shop

ACTIVITY 5
High school

ACTIVITY 6
Timber mill

ACTIVITY 7
Giftware shop

ACTIVITY 8
Computer factory

ACTIVITY 9
Your own activity

Teacher guide notes

USEFULNESS

- Introducing a wide range of working situations.
  (I.e. department store; café; printing centre; pet shop; high school; timber mill; giftware shop; computer factory.)
- Promoting an awareness of and an interest in working situations.
  (I.e. general factors and ideas for the students to think about now and in the future; the aforementioned working situations; other working situations.)
- Understanding a wide range of duties and requirements that are used in working situations.
  (I.e. organising; refilling; shifts; rosters; timetables; serving customers; different departments; preparing orders; monitoring; caring; helping; supporting; talking; sorting; creating; arranging; jobs; duties; assembling; earning.)
- Understanding a large range of mathematical concepts that are used in working situations.
  (I.e. general rates; times; pay rates; averages; variations; differences; amounts.)
- Working with a large range of activities and questions.
  (I.e. straight questions; problems; addition; subtraction; multiplication; division; whole numbers; fractions; percentages; various operations; various businesses; single digit to triple digit numbers.)

MAIN IDEAS FOR THE LESSON

- Hold a discussion on your smartboard about the type of working situation that is the focus of today's lesson.
  (I.e. how many are there in your city?; what do they sell or make?; what do you know about them?; what general and specific things are involved in them?; do these things change sometimes or are they fixed?; have you been there?; do you like them?; would you consider working there one day?; applications in the real world; other points that you want to discuss with the students.)
- Distribute the activity sheets and allow your class several minutes to read through it.
- Check for their understandings and answer any questions that they ask you.
- Choose three students to help you work out a question.
  (I.e. they come out to the smartboard one at a time; they choose one question from anywhere on the activity sheet; they complete it on the smartboard; you and the class can then confirm that they have done it correctly or state the corrections for it.)
- Allow the class approximately 1 hour to complete the activity; you could also schedule two thirty minute lessons for the activity if you feel it is more beneficial for your class.

OTHER IDEAS FOR THE LESSON

Excursion

- Plan an excursion to one of the aforementioned working situations; the manager could speak to your class and take them on a tour of that place.

Guest Speaker

- Invite a guest speaker from one of the aforementioned working situations to visit your classroom; he or she could speak to your class and give them a talk about that place.

Another Series Of Activities 1

- Design another series of activities on a different range of working situations; you could use the same layout and the same types of questions; you could alter them slightly or change them completely.

Another Series Of Activities 2

- As above; ask your class to do it.

Select An Activity From The List

- Ask your class to design and create one of these things; it can be based on one of the aforementioned working situations; they could also choose a different working situation.
    - a floorplan and / or building design
    - an advertisement (recorded verbally)
    - an advertisement (A4 poster)
    - a catalogue (small or large)
    - a collection of puzzles and 'fun' questions
    - a report (short or long)

Working Situations

ACTIVITY 8

COMPUTER FACTORY

1. Assembling keyboards and other parts

I can assemble keyboards and other parts at different rates depending on their difficulty level. How many can I assemble at this rate?

• 30 parts per day • 9½ days	• 14 parts per day • 12½ days	• 11 parts per day • 17 days	• 21 parts per day • 24 days

2. Time on the job

I have a shift that varies in length from day to day. How long is this shift?

• start at 6:30am • finish at 4:00pm	• start at 9:00am • finish at 7:30pm	• start at 3:00pm • finish at 2:00am	• start at 7:30mm • finish at 4:30am

3. Amount of pay

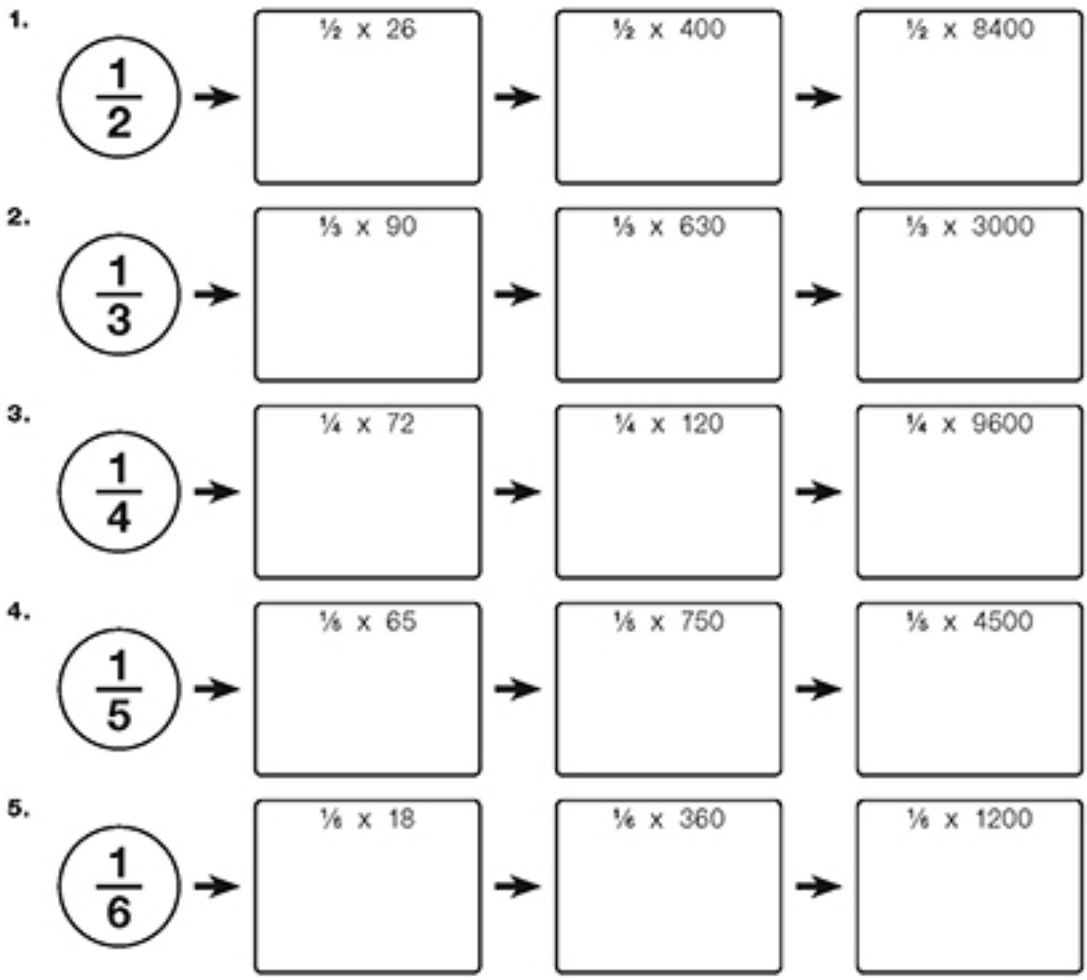
I receive different amounts of pay from day to day. How much did I earn on this day?

• $31.50 per hour • 11 hours	• $17 per hour • 5½ hours	• $26 per hour • 10½ hours	• $23.50 per hour • 8 hours

Fractions

ACTIVITY 1

OF AMOUNTS WHEN THE NUMERATOR IS 1



Percentages

ACTIVITY 5

MARKING THE TEST

Instructions

- *Tick it* if it is right.
- *Cross it* if it is wrong.
- *Correct it* if it is wrong.
- Give a score out of ten for each test.

Test A	/10
1) 25% x 8L = 2L	2) 50% x 6km = 3km
3) 10% x 60kg = 16kg	4) 80% x $40 = $32
5) 93% x $100 = $93	6) 60% x 700kg = 440kg
7) 42% x 6000km = 2550km	8) 55% x 3000L = 1650L
9) 20% x 5 tennis balls = 3 tennis balls	10) 65% x 20 butterflies = 15 butterflies

Test B	/10
1) 25% x 4L = 1L	2) 50% x 2km = 1km
3) 30% x 30kg = 9kg	4) 85% x $80 = $63
5) 35% x $900 = $335	6) 13% x 400kg = 52kg
7) 16% x 1000km = 160km	8) 70% x 8000L = 5800L
9) 90% x 3000 DVDs = 2700 DVDs	10) 77% x 1000 lolly pops = 770 lolly pops

Statistics

ACTIVITY 4

RANGE

1 **4 9 1**

The range is from _____ to _____

The range of this group is _____

2 **5 2 8**

The range is from _____ to _____

The range of this group is _____

3 **12 23 3 6**

The range is from _____ to _____

The range of this group is _____

4 **120 7 34 4**

The range is from _____ to _____

The range of this group is _____

5 **45 2 1800 230 6**

The range is from _____ to _____

The range of this group is _____

6 **78 56 67 95 89**

The range is from _____ to _____

The range of this group is _____

Problems and Challenges

ACTIVITY 2

BALANCED PATTERNS

1. Can you rearrange these fruit trees in the orchard so they fit into both patterns?

3 paddocks with _____ apple trees in each paddock	120 apple trees	_____ paddocks with 20 apple trees in each paddock
_____ paddocks with 12 orange trees in each paddock	96 orange trees	4 paddocks with _____ orange trees in each paddock
5 paddocks with _____ mango trees in each paddock	250 mango trees	_____ paddocks with 25 mango trees in each paddock

2. Can you rearrange this herd of dairy cows on the farm so they fit into both patterns?

_____ paddocks with 70 dairy cows in each paddock	490 dairy cows	2 paddocks with _____ dairy cows in each paddock
11 paddocks with _____ dairy cows in each paddock	330 dairy cows	_____ paddocks with 15 dairy cows in each paddock
_____ paddocks with 20 dairy cows in each paddock	540 dairy cows	9 paddocks with _____ dairy cows in each paddock

Number in the Middle

ACTIVITY 4

540